

The Philosopher's Way

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To my students

of the Sorbonne

and of Mt. Holyoke College

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J. W.

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Introduction

SUCH a thing as a revolutionary textbook in philosophy is probably inconceivable, since the function of a textbook, which is to give ordered solutions to classical problems, is counteracted by a revolution. Moreover, in intellectual matters, a revolution takes time and is the product of many different individuals, so that it is difficult to write about a philosophical revolution that is still in progress. Such an enterprise would not be completely satisfactory for another reason. There is a philosophical tradition, and if one does not know this tradition, he cannot understand the revolution. It is essential to reveal the continuity of thought from the ancient Greeks to our time, notwithstanding revolutions and wars. Americans and Europeans must be more than ever aware of the fact that they are heirs to a very old culture, beginning in philosophy with Thales and Anaximander. For philosophical problems cannot be separated from their historical background. The consideration we must give to history in the study of philosophy is of a particular kind; the stress is upon philosophy, whose history we study, rather than upon history as the succession in time of the thoughts of men. Nevertheless, it is in their relation to the actual or future revolutions as well as to historical background that we shall consider the problems of philosophy.

This does not necessarily mean that there is any progress in philosophy. In one sense at least there is no progress. For example, Plato will never be surpassed. But there are changes of perspective, particular insights into the eternal problems at a given time, and there is a kind of movement. Whether or not this constitutes progress cannot be decided at the beginning. Doubtless in regard to certain questions the terms of the problems have been more clearly

defined, some problems have been dropped, while others have emerged. On the whole, however, it is rather a good thing to believe that the great thinkers of the past were at least as far-sighted as we are. We may say, for example, that the Greek philosophers saw the problems with a simplicity and a kind of naiveté to which it is always refreshing to return, that in Descartes there is an audacity that has rarely been matched, and that Kant has pondered the problems more painstakingly than anyone else. Plato, Descartes, and Kant—and we might perhaps add Hegel—stand as probably the most important landmarks in the whole history of philosophy.

There is no doubt that a need for discerning the link between the culture of the West and that of the East will be increasingly felt. There have been certain relationships between them from the beginning, which were later visible also in Plato, Pyrrho, Plotinus, St. John, Spinoza, Malebranche, Leibnitz, and Schopenhauer. Let us add that the study of the similarities between the elements of the Western and Eastern traditions must not blind us to their differences and, above all, to the fact that probably what stands highest in one of these traditions has been represented in some manner in the other—or, indeed, has its equivalent in the other.

We must take account of the fact that the tradition of the *philosophia perennis* has perhaps put into the background some fundamental traits in man, has destroyed in a certain measure the feeling of our kinship with the universe, which poetry has better retained. The great value of Whitehead's work consists in his effort to unite man with the universe through a criticism of Cartesian and Kantian conceptions and through a remodeling of our ideas of cause and substance as well as of time and space according to the data of the new scientific discoveries and to more subtle, and sometimes more compact, ways of feeling. We shall have to abandon many of the frames of thought that were handed down to us from the time of Greece, the Middle Ages, and the Renaissance.

We are on the eve of a revolution of thought analogous to that which took place when man turned from the ancient world with its diffidence toward the infinite, toward time, and toward matter, to the modern world with its awareness of infinity and time, and a knowable matter. Now we have to give a new, less conceptual,

form to these ideas of infinity, time, and matter. Perhaps this revolution will be even greater than the preceding one. Its dangers and the possibilities of its misinterpretation (already illustrated in some elements of Nietzsche's thought, and particularly as they have been misconstrued by some of his apparent and superficial followers) must not blind us to the necessity for it. But this necessity makes it even more essential that we understand the frame of thought typified in Hobbes, Locke, and Hume, as well as in Plato, Descartes, and Kant.

In the exposition of the different systems we shall be hampered by the over-simplifications and confusions caused by traditional philosophical terms. There are no more dangerous terms for philosophical thinking than 'realism,' 'idealism,' 'rationalism,' 'empiricism,' et cetera. Yet even when the teacher tells his students not to use them, he realizes that he himself will be forced to do so; we shall therefore always try to specify the sense in which we are using these terms. Let us for the moment notice simply that realism has one meaning as opposed to nominalism and quite another meaning when opposed to idealism, so that, for example, Plato is a realist in the former meaning and an idealist in the latter.

The history of philosophical thought, like that of humanity at large, has been a glorious but unhappy one. Remaining aware of the achievements of the great thinkers, we must look elsewhere for a richer and more adequate view of reality. But the passage of our minds through the great philosophies will always bring an invaluable gain. We must become acquainted with them and treasure them in our memories. We must greet them before we bid them a respectful farewell. We must not forget them. Even Plato, as has been shown recently more than once, is not so far from some very modern theories.

Thus, conscious of the revolution in the midst of which we stand, and also of our right to question this revolution, mindful of the cultural tradition of philosophy, attentive to the eternal utterances of poetry as well as to the provisional certainties of science, we shall begin our philosophical journey aware of the conflicts between our different tendencies and feelings. A student to whom the sophisms of Zeno about the negation of movement were presented together with a tentative refutation and solution said, 'I see the

solution, but I do not see the problem.' We shall not be too unhappy if, not completely seeing the solution, we at least see the problem and, going the philosopher's way, maintain faith in our human enterprise.

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THE PHILOSOPHER'S WAY

I The Necessary Revision of Metaphysical Concepts

IN ORDER to appreciate what changes have to be made in the concepts of metaphysics, it would be well briefly to consider their history and to observe how some have undergone different modifications at different times, while others have remained relatively unchanged. The very fact that from antiquity to the present day a kind of revolution has been going on in some of these ideas will incline us to the belief that a similar revolution may take place now. On the other hand, we shall have to question the validity of those concepts that have come down to us unchanged, for perhaps they ought to have been changed. Thus, we shall consider both the fact of change and the fact of permanence as signs of the necessity for a revolution in our ideas.

The Pre-Socratics, seeking to determine the substance of things, did not clearly distinguish between the material and the spiritual. What is certain is that the language they used was full of terms referring to matter. Thales, for example, identified the substance of things with water, and Anaximenes with air. It was mainly by the Pythagoreans that the problem of substance was placed in a clearer light. For them the substance of things was neither water nor air, but number, something that seems to us very abstract. They had studied astronomy, acoustics, and mathematics, and everywhere they had found number. So they said that things imitate numbers, and even that they are numbers.

Socrates and Plato continued the Pythagorean tradition but modified it, replacing the concept of imitation by that of participation and the concept of number by that of Ideas. Whereas the Pythagoreans founded their speculations on mathematics, the start-

ing point of Socrates was in ethical considerations. Under what conditions may I say that an act is good or bad? There must be some ethical rules, independent of the individual, notwithstanding what the Sophists had said. Thus, mathematics and ethics are two of the origins of the theory of Ideas. A third may be found in the consideration of a work of art. The Greeks were a nation of artists. What happens when an artist makes a statue or when a craftsman makes a table? He finds within himself the Idea of a table or the Idea that will be expressed in the statue, and he informs the matter according to that Idea. The Demiurge of Plato—and the word means craftsman—contemplates the Ideas in order to organize the world.

Of these three origins of the theory of Ideas, mathematics, ethics, and art, which is the most fundamental? The Pythagoreans would have said mathematics; some scholars would say ethics; we should rather say art.¹ But this does not matter. Three human activities, each one admirable, are the origin of the theory of Ideas, which is a kind of metaphor expressing the structure of the world in terms of these activities. But the question may be raised whether it is legitimate for man to start from the consideration of these activities, admirable though they may be, to interpret nature. For *he* has formulated the rules of good and evil, *he* has invented mathematics, *he* is the origin of every work of art.

Let us notice also that if things are formed in the manner described by Plato and Aristotle, there are at least two elements that are formed in another manner: the Being who informs things (God) and the matter of the things.

The word by which Plato and Aristotle designate the essence of things is εἶδος, which is ordinarily translated by the word 'Idea' when it is found in Plato and by the word 'form' when it is found in Aristotle. Now this word, as well as the word ἰδέα, also used by Plato, means aspect or thing seen. This shows how the sense of sight has dominated philosophical speculation—a point that has been emphasized by Whitehead in opposing causal efficacy to visual

¹ It is interesting to note in the evolution of Plato's doctrine that he gave an increasingly greater place to numbers, making himself more and more definitely a kind of follower of Pythagoras, and that in one of the last stages of his philosophy he denied that there are Ideas of artificial things, thus canceling or hiding one of the fundamental origins of his theory.

immediacy. According to him, many philosophers, and particularly Hume, were able to see the world only as a succession of rather discontinuous views, because they had limited themselves to the sense of sight. Hume did not see that when I lift my arm something takes place that is not accessible to visual immediacy but that is nevertheless felt and real. One could find in Berkeley, Maine de Biran, and Bergson important indications of the same criticism that Whitehead has made.

Aristotle, the great disciple and the great adversary of Plato, does not start from the consideration of ethics or mathematics but from art, as Plato does, and one of the examples he takes is that of the statue. But to this consideration he adds biological arguments and also grammatical observations. Man comes from man. It is no longer the Idea that generates, it is the individual man, or, rather, it is the incarnated form that generates the individual man. Moreover, logic, or more correctly, grammar, teaches us, according to Aristotle, that in a proposition there is always a subject and an attribute. In saying this, he reveals to us one of the most profound origins of the concept of substance. In fact, the two philosophers who have most strongly emphasized the idea of substance, Aristotle and Leibnitz, have linked this idea with their theory of logic.

For Plato, the attribute was the substance. For Aristotle, it was rather the subject that was the substance, but linked with some attribute. As Plato himself saw, his theory of Ideas, as it was presented in his writings up to the *Republic*, was not quite satisfactory, and he had either to return to Pythagoreanism or to transform his whole theory. And in fact he tried both these ways. As for Aristotle, he put the problem of substance into admirably clear terms. But he was not able to solve it. For if he says that form is substance, he falls again into the Platonic solution. On the other hand, he cannot logically say that substance is matter. And if he says that substance is the union of matter and form, this solution, which he seems to prefer, remains ambiguous or leads only to a tautology, such as 'Socrates is Socrates,' since Socrates is a union of matter and form.

The same word εἶδος, used by Plato and Aristotle, is also used by Democritus, one of the opponents of their kind of philosophy. Democritus calls his atom εἶδος, an aspect, a thing seen. The qualities he attributes to the atom, or rather the negation of some qualities

he attributes to it, give rise to many problems he cannot solve, any more than Plato and Aristotle could solve theirs.

So far we have considered certain features of philosophical speculation that have remained unchanged up to the present: the importance of mathematics, ethics, and art, the predominance of the sense of sight; and the influence of grammar and a certain conception of biological inheritance. Man reveals himself in formulating this idea of substance. But this fact must not hinder man from asking himself whether from ethics, art, grammar, mathematics, which he creates, and from the qualities of the sense of sight and from a rather imperfect conception of biology, he has the right to deduce the essence of the universe.

Let us now try to show that between antiquity and modern times there has taken place a kind of revolution, and this consideration will perhaps allow us to conceive the idea of a revolution that will take place between modern thought and future thought.

For the ancients, time had no great importance. Moral, aesthetic, and mathematical judgments are above time. An act is good because it partakes of the good, a person is beautiful because he partakes of beauty, but what is real is the beautiful and the good. So time has in itself only a negative importance, as it were. In itself it is decadence, decay. It is in the past, in an eternal past, in the atemporal, that one has to seek the truth. What is more, this time, which in itself is decadence, passes into greater and greater decadence, and, although one may quote some beautiful lines of Aeschylus or Lucretius on progress, and particularly on indefinite future progress, the idea of progress is not one that dominated the thought of antiquity.

What has been said about the theory of Ideas will permit us also to understand what the relations between the finite and the infinite were for the ancient philosophers. The Greeks loved to see the sun playing on things, defining by its rays the clear structures of their temples. For them the finite was superior to the infinite.²

² Naturally, there are some exceptions—Anaximander and Melissus, for example. But it suffices to see with what rudeness Aristotle speaks of them. Plotinus is another great exception; but Plotinus is already the East introducing itself into Greek philosophy, and in one sense he is the first of the modern philosophers.

A third feature that differentiates modern from ancient thought is the importance given to evil. For Socrates, evil is pure negation. It comes from ignorance, and nobody acts voluntarily in an evil manner. For Hebraic and Christian thought, on the other hand, evil has a positive reality.

Moreover, whereas for Plato, according to the *Phaedo*, the soul participates in the Ideas and tries to assimilate itself to them, and in the *Timaeus* the soul of the Demiurge looks at the Ideas, in modern philosophy, as Bergson has observed, there is, on the contrary, a tendency to place the soul above the Ideas. In ancient philosophy the soul contemplates the Ideas; modern philosophy tends to conceive the soul as, in a sense, the source of the Ideas.

Now all these changes are connected with a great historical event—the rise of Christianity. It is Christianity that gives so much importance to time, presenting to man a time directed, as it were, toward its own middle, that instant in which the infinite became finite, when God incarnated Himself among men. It is in relation to this instant that everything takes its meaning. In fact, except for a passage in the *Parmenides* of Plato on the instant and for some lines in Pindar and the tragic poets, the first thinker to see time as a problem is Saint Augustine. From Saint Augustine to Pascal and Kierkegaard we might say that modern thought has shown a continuous tendency to be concerned with time.

A second great event that must also be taken into account is the development of science. Modern science studies movement with more detail and care than did the science of antiquity, thanks particularly to the infinitesimal calculus. Leibnitz is the philosopher whose doctrine was especially influenced by the development of this method. And the problem of movement, already emphasized by him and, before him, by Hobbes, assumed greater and greater importance in the following centuries.

Thus the idea of progress and the Christian conception of the self-transcending moment of incarnation tended to replace the ancient conception of timelessness. On the other hand, whereas for the ancient philosophers quality was something definite and quantity something indefinite, going always, as Plato said, toward the greater or the lesser, for modern thinkers, on the contrary, quantity is something definite, which science can study, and quality has become indefinite.

If we wish to view in its totality the world as it is conceived by most of the thinkers of the modern period, we shall first see God—who is called by them the infinite—at the summit, then the finitude of quantity and of the clear and distinct ideas, and then at the bottom the indefiniteness of qualities. The qualities of matter, at least the secondary ones, have become indefinite; quantity is now considered as coinciding with the finite; and as for the idea of the infinite, it has become separated into God, on the one hand, who may be called the good infinite, and, on the other hand, the bad infinite, or rather the indefiniteness of qualities.

During the Middle Ages two attempts were made to unite the philosophy of antiquity and the Christian tradition. One was based on Plato, the other on Aristotle. The latter attempt, which was predominant during the late Middle Ages, could not succeed very well, because the same difficulties that had faced the original philosophy of Aristotle faced the disciples of Aquinas.

In the seventeenth century Descartes tried to unite certain concepts of Plato with science. For example, he retained from Plato the conception of the Ideas, although he conceived them in a more subjective manner, and the theory of the *simple natures*, which are implied in the theories of Plato and Aristotle. In proving the existence of God from the Idea of the infinite, he gave a clear formulation to the whole rationalistic scheme that was implied in their philosophies. According to Descartes, there is a hierarchy of beings, which goes from the perfect, infinite Being (God) to our finite and imperfect beings.

Descartes' philosophy was helpful in demolishing certain ambiguous concepts of the Aristotelian and Thomistic philosophies, in which the spiritual and the material were confounded, and it is thanks to the separation that Descartes effected between them that science has been able to constitute itself solely upon the basis of the concepts of space and movement. At the same time, Descartes' philosophy introduced certain presuppositions that were conditioned by the state of science in his day. Thus, he conceived space as made up of separate points and time as made up of separate instants. Now we know, in particular from the work of Whitehead, that science by no means implies such a conception of space and time and indeed that it implies quite another conception, according to which the instants and points are not separated in the manner

supposed by Descartes and even are not separated at all. What is more, space and time cannot be separated from each other. There are only events, involved in one another and radiating into one another.

In fact, the very history of Cartesianism sufficiently proves the inadequacies of the theory. For, having separated thought and matter so completely, Descartes could not easily explain their union. First he himself and then his disciples had to take recourse to difficult devices. Let us for the moment say only that for Descartes there were, on the one hand, thought and qualities, which, according to him, originate in thought, and, on the other hand, movement. But the connection between them is not easy to find.

As the failure of the thought of the Middle Ages had given rise to the philosophy of Descartes, so we may say that the failure of the philosophy of Descartes, of his followers, and even of his critics when they placed themselves on the same level of thought, gave rise to the philosophy of Kant. But again, in Kant's philosophy we find some unwarranted presuppositions. For example, Kant accepts as an unchallengeable presupposition the thesis that there would be no appearances if there were not things that appear and are different from the appearances. He also accepts the Aristotelian distinction between form and matter but applies it in a different manner: the matter of sensation is unknowable, and the forms, being the structure of the mind's activity, are susceptible of being known by it. Kant's successors tried to do away with the distinction between appearances and the things that appear, but they retained the distinction between form and matter.

How the Kantian scheme can be transformed today may be seen in the work of such philosophers as Cassirer and Brunschvicg, who emphasize the legislating power of the mind and pay little attention to the matter that the mind informs, and of still others who emphasize the element of structure (*Gestalt*) that is in things themselves.

So far we have followed the history of the rationalistic theories. But there was also the tradition of empiricism. Locke and Hume may stand as its representatives. However, the question may be raised, and indeed has been raised by William James, whether they were empirical enough. For they saw in experience only the terms, which they conceived as disconnected, and did not pay enough attention to the relations, to the transitions between the terms. The

strength of the rationalists, their opponents, lies in the fact that they emphasize precisely these relations.

We have now reached a point where the development of science, on the one hand, showing everywhere the inadequacy of the former schemes of space, time, and cause, and the development of *Gestalt* psychology and psychoanalysis, on the other, with its idea of overdetermination,³ make us realize that new modes of thought have to be found. The classical principles have vanished; the frames have been shattered. In fact, there are no longer any frames, and the very things that were in these frames have themselves disappeared. Thus we are confronted by an intricacy of phenomena of which the classical philosophies give us no idea. We are in the presence of a no-man's land, even a no-word's land.

In the discovery of these new realms of thought, we may be helped by certain poets and painters. In the poems of Claudel and Valéry we may find examples, on the one hand, of how we may be united with what is most dense and compact in reality, and, on the other, how we may participate in the most subtle relations that constitute the real.⁴ Perhaps too we might find in Rilke some notions of our kinship with the universe. A poet like Shelley gives us an idea of the fusion of permanence and change, both of which, according to certain passages of Plato, we wish to keep, like children who want incompatible things. Painters like Cézanne may also be our teachers.

But philosophers too may have something to say. We have already mentioned the *Gestalt* psychology, which emphasizes forms and structures, and psychoanalysis. In philosophy itself, Brunschvicg and Bachelard and the phenomenologists may give us some hints of this fugitive reality. Most of all, Husserl and Heidegger, in putting human thought back, as it were, into the world, where it belongs, in teaching us to go further than the distinction between subject and object and to reach a moment that is prior to judgment, continuing, in fact, a movement already visible in James and Bergson, may make important contributions to what we might call this future philosophy.

³ A fact explained in terms of one series of causes is nevertheless explainable in terms of another, supplementary series.

⁴ It would be difficult to find the exact equivalent in English or American poetry. But we might mention Whitman, on the one hand, and some suggestions in the prose of Poe or in the poetry of Emily Dickinson, on the other.

Husserl has emphasized what he calls the intentionality of thought. Thought is always directed toward the things that are not itself. Berkeley has said that there is only knowledge about ideas. But we might say rather that there is only knowledge about things other than ideas. The *cogito* always refers to something. Malebranche had seen that one cannot abstract the *cogito* from the *cogitatum*; and Kant went a little further in the same direction.

We may also question the Cartesian theory of representative ideas. James has pointed out that thoughts are the things themselves merely in a new context, and, just as we say that things are, so we might say that thoughts are. In this sense, 'representations' are, but do not represent.

We shall see also that the criticism of causality was to have some effect on the theory of knowledge, as Dewey and Price have shown, and also on the solution of the problem of the union of soul and body.

According to Descartes, material reality was only the one infinite or indefinite space. So he eliminated particular objects. Husserl has shown that we must accept even this experience of objects at its face value, to use an expression of James's, that in perception we see things in their corporeality, and that a thing is a succession of its perspectives. But on this last point we might perhaps go even further, showing that there is something else than this succession, that there is a kind of kernel in things, and that this also has at least to be studied, though it cannot be analyzed. Our world ceases to be a world of pure space, even a world of pure phenomena; it is no longer the world of Descartes or Hume or Kant, but a world in which things present themselves in their partial wholeness, in their opacity.

Thus we find ourselves in the presence of a pre-relational realm, as Bradley calls it, or a pre-predicative element, to use the expression of Husserl.

And this realm is given to man as an existent being: Here we find the idea of existence as it has been emphasized by Kierkegaard. Existence stands in a natural relation to what transcends it. This conception of existence has passed from Kierkegaard to other philosophers who, having canceled the idea of God, so important in the philosophy of Kierkegaard, have nevertheless retained the idea of transcendence, but applied it to the relation of the existent man

to the world. These ideas, which have been developed by those who are called philosophers of existence, are also to be found in the philosophy of Whitehead, who shows that hope and fear are some of the conditions of our knowledge.

There is no reason for abstracting knowledge from the other primary relations of man to the world. Pragmatism has already stressed the value of knowledge for action. When Heidegger emphasizes the structure of instruments and things that are made in view of this or that operation, he formulates the conceptions of the pragmatists in a more metaphysical manner. When Bergson shows that general ideas have their origin in action, he directs our attention toward the same fact. Objects are not only present to visual immediacy, to borrow again an expression of Whitehead's, they are instruments for our action or obstacles to our action—we might even say kinds of objections.

Nevertheless, what we have said in no way impairs the value of science. Here we have to introduce the idea of a scale of reality. Man is in a certain situation in the universe, and from that situation he sees the objects as he sees them. But he also has the power, in order to explain phenomena, to place himself on a level of Being different from that in which he sees them naturally, and by this operation he is able to understand more fully, at the same time that he is, by this very fact, in danger of forgetting his real situation. The starting point of science is always common sense, even if the conceptions of common sense seem to be destroyed by science. Moreover, from the point of view of science there are revealed aspects of reality that, even if they are not real from the point of view of the common-sense man, are nevertheless real for another being into which man transforms himself through science.

As a result of the observations of certain recent philosophers, we are on the road that leads to immediacy. For immediacy is never given in the beginning, it has to be striven for and attained at last, if it can be attained at all. Notwithstanding Hegel's criticism of the idea of immediacy, an immediate vision remains the goal of the philosopher. The criticism of Hegel was based on an analysis of language. According to him, the now and the here, being always changing, are only abstract ideas. But he did not take account of the fact that the sentence containing the words 'now' and 'here' points to a reality beyond itself, and, as we have

said, that thought is always directed toward things. Hegel's criticism is destructive of the intellectual now and here, but not the now and the here as they are felt, which language can describe only imperfectly. From the imperfections of language we cannot infer anything about the so-called imperfections of reality.

One might consider the philosophy of Hegel as the perfection as well as, in a certain manner, the destruction of classical philosophy. He has emphasized the universal process of mediation, which is the basis of rational thought. After him philosophers like Kierkegaard, James, and Bergson have stressed the value of immediacy and have wanted the human mind to perform a kind of regress toward this lost paradise.

From this point of view, we shall have to criticize our language, which is always a translation into mediate terms of what was first given and apprehended. In particular, we ought to question the prepositions. Berkeley has said that, when speaking of ideas, we must do away with the preposition *of*. We might say the same with regard to prepositions like *with* and *in*.

Therefore, when we say, with some recent philosophers, that man is existentially *in* the world, we have to realize that these terms are not satisfactory, because there is no world—though there is a feeling of the world—there is no *in*, and there is no *is*.

It is this inadequacy of our thoughts to the reality that they aim at representing that requires the dialectical process by which we have always to supplement one idea by its contrary, discovering, for example, behind continuity new discontinuities, and behind these still other continuities, and so on indefinitely, never exhausting the richness and the inexpressibility of the real.

This dialectical movement may explain the great oppositions between which human thought is more and more divided, for example, the tension between what Sheldon has called great subjectivism and great objectivism.

All these oppositions and tensions, together with the striving toward a living unity, are the reasons for the revolt of many philosophers in recent times, in particular since Nietzsche, against the great classical philosophies. We find Nietzsche, James, Bergson, Kierkegaard, and Heidegger criticizing Plato; Kierkegaard, Heidegger, Jaspers, and Whitehead criticizing Descartes; James criticizing Spinoza; et cetera. Many of these philosophers advocate a

return to the Sophists and even—with better reason—to the Pre-Socratics.

On the other hand, each period of human thought has its own interpretation of the great philosophers. And there is some chance that our interpretation of Plato, for example, is more nearly correct than the interpretations of our predecessors. Today we believe that the theory of Ideas, as it was expressed in the *Phaedo* and the *Republic*, is not the last word of Plato's philosophy. In the *Sophist* he shows that there is movement in the realm of the Ideas, and in the *Philebus* we see that there are some stabilities and some kinds of essences in the sensible realm, which was at first conceived as the realm of Becoming. Thus Plato tended to unite what he had first separated, and when, in the *Sophist*, he defines reality as power, he gives us a hint of what he conceives to be the real, even if the theory he gives there is only provisional. We might make nearly the same observations with regard to Descartes, whose theory of the union of the soul and the body is really much broader than the ordinary interpretations of it would have us believe.

In this manner we may end our survey with the same remark that was made in the beginning, that is, that there is no progress in philosophy, the past seeming more and more profound as we go toward the future, and that in another sense there is progress, since this deepening of the past depends upon a wider view and a more real communion with the universe.

We might have reached the same conclusions by beginning with a meditation upon the meaning of the term 'philosophy.' This term means, it is generally admitted, the love of wisdom. If we considered what these words, 'love' and 'wisdom,' really mean, and if we pursued our reflections far enough, we should be led very far indeed—to the end of the world, and perhaps even farther. For one thing, we can see from the very word 'philosophy' that love can be felt not only for persons; there are also things that are loved, for one speaks of loving wisdom. It is true that great poets have seen wisdom in the form of persons, and there has been much controversy about what Dante meant by Beatrice. We have been told sometimes that by her he meant theology.

We may find in Plato something that bears upon the definition of love, and this is of particular interest to us because it was very

near this point in the history of thought that the term 'philosophy' was given its meaning. Love, he says, is the child of poverty and of abundance. There is something of a need in love, and need is very close to poverty; and there is a kind of plentifulness, and plentifulness is very close to richness

Plato tells us also that love is a quest, through particular bodies and souls, of the universal Idea of beauty.

Now what does the second part of the word 'philosophy' mean? What is meant by 'wisdom'? Heidegger has called our attention to the fact that this word does not strictly mean knowledge, but rather a kind of familiarity with things. To know how to deal with things—this is the first meaning of 'wisdom.' Perhaps we must return to this kind of brotherly intuition; perhaps man has wandered too far from nature.

To be sure, we are very far from the definitions Aristotle gave of philosophy when he called it the study of Being *qua* Being or when he said that it was the study of first causes and principles. For it is precisely these ideas of Being and of cause that we shall have to question. We shall not even say that philosophy is a science in the ordinary sense of the word. It is essentially a quest, a search for knowledge, but for a knowledge that is not necessarily reducible to intellectual understanding. The goal of philosophy might be more akin to what Alexander has called 'compresence with things,' Whitehead 'prehension,' and Heidegger 'being in the world.'

THE word 'substance' itself tells us something about its meaning. Substance is what stands under—i.e. under the appearances. When we think of substance, we have the idea of something permanent beneath change, a unity behind the multiplicity. So we see from the first that here, as for many metaphysical concepts, a relation is implied, or, to speak more precisely, a dichotomy, a bifurcation, namely, the dichotomy between appearances or phenomena and substance. There is substance only in relation to something that is not substance. The idea of substance would have no meaning in the absence of something that differs from substance.¹

But at the same time it is an idea that affirms itself independently of its relations.² We already see here one of the great difficulties that will confront us in our study of substance. The human mind has at the same time to keep the link between substance and its properties and to keep substance distinct from its properties.

The history of philosophy may throw some light upon the activity of the mind in the presence of the problem of substance. Philosophers were divided first according to the kind of substance or stuff they supposed to be at the bottom of the universe. Was it water, air, fire? All these seem like material substances, although the water of Thales was full of gods, and the fire of Heraclitus was at the same time the movement of things and what ruled this movement, the order of the movement. It is indeed very difficult to decide whether the unmovable light of Parmenides or the ceaselessly moving fire of Heraclitus are material or not. They were

¹ The classical philosophers have insisted rather on the reverse of the same idea: that which differs from substance has no reality without substance.

² If we wish to establish a distinction between essence and substance, we might say that substance is an essence that exists.

probably thought of as material things standing as symbols of non-material things. We might say that in this period of philosophy there was no complete separation between the material and the spiritual; there was no clear idea of either. But perhaps these very ancient philosophers were in fact nearer the truth than we are today.

This absence of separation between the material and the spiritual is to be seen even in the thought of Parmenides, who represented the world both as a perfect sphere and as the perfect unity of the thinking being and the object of his thought.

A little later it was not only about the qualities of substance but also about the number of substances that the problem was raised. We have said that a dualism or dichotomy is inherent in the idea of substance. When Thales said that the water is full of gods, he was already introducing a cleavage between the water and the gods present in the water. Heraclitus too, in saying that the fire orders the things, and even that the Logos, which is the fire and the order of things, is apart from the things, introduced a dualism into his philosophy. The dualism is still more obvious in the philosophy of the Pythagoreans; in Empedocles, who separated the elements on one side and Hate and Love, the divisive and unifying forces in things, or rather over things, on the other; and in Anaxagoras, who distinguished mind from the infinite elements with which it composes things.

Then the problem that was immanent in the preceding philosophies came to full light with Socrates, under the influence of the Pythagoreans and his own moral speculations. The substance became the Idea. And in the *Phaedo* Plato closely united this theory of the Idea with the theory of the soul. Here we see for the first time a clear affirmation of a spiritual substance.

Whereas Parmenides emphasized the unity and the immutability of things, and Heraclitus their unceasing movement, Plato tried to reconcile these two opposite views and to have at once both rest and movement, thereby achieving a synthesis of the preceding philosophies.

We have already seen how Plato tended more and more toward the conception of a substance in which unity is joined with multiplicity, as in some passages of the *Republic*, and with change and Becoming, as in the *Philebus*.

Aristotle had perhaps more influence on the development of the idea of substance than Plato. He criticized Plato for having too abstract an idea of substance, for Plato had identified it with essence. In this criticism Aristotle was probably right. As we have seen, he himself thought that substance is rather the union of form and matter. But he could not say how the essence can exist independently of matter, and so his substance is not substance unless it has an unsubstantial element added to it.

Leaving aside the materialism of the Epicureans and the Stoics (who tempered it with their belief in incorporeal things) and all the controversies that raged in the Middle Ages about individualization by matter and individualization by form and about the reality of universals, let us come to Descartes, who negated precisely these ideas of Aristotle about substance and tried to return to a more abstract and mathematical substance.

We find this idea of substance in three important parts of the philosophy of Descartes. First, when he has said, 'I think; therefore, I am,' he asks himself, 'Who am I?' and answers, 'A thinking being, a soul.' Thus, from the act of thinking, he concludes that there is a soul substance. The fact that the first substance he discovers is the thinking substance and is wholly transparent to thought is proof of the idealism of Descartes. But thought conceives another substance, the extended substance. For in the different sensible things, there is, for Descartes, only one reality, that is, space, the indefinite extension.⁸ All that is real in a particular object is the universality of this extended substance, which mathematical science studies. Here we already see a difficulty of this doctrine: whereas the spiritual substance is concentrated and diversified in many minds, the extended substance is unique. Spinoza tried to render the two substances more adequate to each other by making of the thinking substance something unique also, in which the different souls are merged into a unity the more we advance toward a clearer and more complete knowledge. Leibnitz, on the other hand, tried to achieve the same correspondence between the two substances from the opposite side, representing matter as com-

⁸ In particular, Descartes denied the more 'dynamic' aspect of Aristotle's philosophy. According to Descartes, there is only the mind in act on one side and the extended substance in act on the other.

posed of a multiplicity of thoughts. Thus, whereas Spinoza unified thought, Leibnitz multiplied matter and diversified thought.

Another problem of the Cartesian philosophy arises from the fact that both the thinking substance and the extended substance are created by God. The same term is applied to two finite substances and one infinite substance. As Descartes said, the term 'substance' does not have the same meaning when it is applied to God as it has when it is applied to His creatures. One solution of the problem, that of Spinoza, is to call attributes what were for Descartes the two finite substances and to reserve the term 'substance' only for God. According to Spinoza, the attributes are infinite in number, but we know only two, thought and extension. We might say that each is a translation of the same original text in different languages, and this is why they correspond to each other.

Leibnitz tried to avoid the pantheistic consequences of the two modifications that Spinoza had made in the Cartesian system; for, if we keep only one substance, and if we consider the attribute of thought as really undivided into minds, there seems to be very little place left for human action and personality. Leibnitz even tried to replace the Cartesian notion of extension. Being abstract and homogeneous, extension, according to Leibnitz, can only be something abstracted, a kind of fiction of the mind, and so does not deserve the name of substance. On this point we might compare the theory of Leibnitz to that of Berkeley. Extension is not an attribute, as it was for Spinoza, and is naturally even less a substance, as it was for Descartes. What is real behind this appearance that is extension is monads, spiritual substances. Consequently, there is no longer one spiritual substance, but a multiplicity of spiritual substances. And each one is essentially force and action. On this point too we might compare Leibnitz to Berkeley.

This dynamic and psychological conception of substance is founded in its turn upon the logical affirmation that every attribute is inherent in a subject. Leibnitz fused the logical subject, the psychological subject, and the essence.

But Leibnitz's system raises as many difficulties as it solves.⁴ In

⁴ We might say that Leibnitz unified the world by multiplying the substances even to infinity. The substance of the substances, if we may so speak, is one, since it is mind, force, energy. Everywhere there is force, everywhere life. But the substances are infinite in number, forming an infinite hierarchy, which goes from the 'naked' monads to the monad of monads.

particular, we may ask what the relation is among the different monads and also what the relation is between the central monad, God, and the others.⁵

In fact, this was a problem in every philosophy derived from Descartes. The material and the spiritual substances had been too sharply separated. How, then, being so different, can they act on each other? Here too Spinoza, Malebranche, and Leibnitz had to provide solutions. Malebranche said that the only action that takes place is that of God, who by his laws orders the communication between the two substances. Spinoza had recourse to a kind of correspondence between the two attributes, and Leibnitz to what he called a pre-established harmony.

Thus, starting from Descartes, we have a monism and a pluralism—the monism of Spinoza, as strict in a certain sense as that of Parmenides, and the pluralism of Leibnitz, the monadism, as variegated (and unified) as the world of Anaxagoras.

Let us summarize the problems and difficulties of the Cartesian philosophy. How will the substances communicate? (We might say that this is another form of the very old problem of participation.) How can we give the name 'substance' to two things, matter and thought, which depend on a third, God, who creates them both and who alone seems to have the privilege of being the real substance? How is it that extension is one and continuous and that minds are many and personal? How is it that one substance, matter, is what is clear and distinct for the other, mind, and what is the meaning of this pre-eminence of one substance over the other, expressed and even emphasized by the fact that God is a spiritual substance and not at all a material substance? And what are the relations of the attributes to the substances—for example, of thought to the soul? Are they the same thing or not?

Thus far we have considered only one of the tendencies of Western philosophy. Another is the empiricism of Locke and Hume. Thinking about what the scholastic and Cartesian philosophers had said concerning substance, with all their difficulties and contradictions, Locke concluded that substance is an 'I know not what',

⁵ There is also this difficulty in Leibnitz if substance is simply the law of the series, this involves either the negation of real substance or the supposition of a mind different from the law, a mind that thinks the law, or if it is something other than the law of the series, what is its relation to that law?

nevertheless, he believed that it exists and that beneath the properties there is a something—a something about which we can say nothing.

This explains why Berkeley could maintain that there is no material substance. However, he kept this idea of substance for spiritual beings; or, we might more correctly say, he kept the notion, for ideas, being inert, cannot represent active beings, and so Berkeley had to find a word to signify the apprehension of mind by mind, something very near to what Bergson was later to call intuition.

Hume denied the existence not only of material substance, but also of the spiritual substances, and his doctrine on this point is the logical conclusion of the development that had begun with Locke's affirmation that substance is an 'I know not what,' whereas for Descartes it had been a very clear and distinct idea.

Such was the situation of Western philosophy when Kant began his meditations. The task he set for himself was to show that what he called the *a priori* ideas, and among them the idea of substance, although they cannot be found in experience—and on this point the conclusions of Hume seemed to him conclusive—are nevertheless necessary and real in the sense that the human mind imposes them on experience, indeed creates experience by them. •

According to Kant, the human mind has to find beneath change something that is permanent, and this he called substance. He conceived substance as a rule, reasserting and applying to experience one of the ideas of Leibnitz, according to which substance is the law of the series of phenomena.

Thus we seem to be freed from the problems of the preceding philosophies, at least as long as Kant remains within the limits of the pure theoretical reason, although even here his assumption of things-in-themselves as the foundation of appearance is in fact an application of the principle of substance and so a continuation of the old manner of philosophizing. And when he passes to the practical reason, he restores the classical affirmations of God and the immortality of the soul.

Kant could not destroy the dialectical illusion. Philosophers remained caught, and necessarily caught, in it, thus verifying Kant's belief in the inevitability of dialectics and nullifying his attempt to find some way of escape. Fichte, Schelling, and Hegel restored the

idea of substance to its former place (let us assume for the moment that it had indeed been displaced). Schelling spoke of the indifference of substance in relation to its attributes. Hegel made of substance the subject and tried to unify the views of Fichte and Schelling at the same time that he criticized them both.

But in Schopenhauer we find the affirmation that the idea of substance is an abstraction drawn from matter, the petrification of the attributes, and a kind of materialization of the spiritual. For Lotze, things are not things because a substance is hidden in them, but we must rather say that, precisely because they are what they are, they have the false appearance of being founded on something that is called substance.

Thus, when Nietzsche and the pragmatists, on the one hand, and the logical positivists, on the other, deny the idea of substance, they are only continuing a movement that was already found in thinkers like Lotze.

We have not spoken of the materialistic theory of substance, which we may find in Democritus among the ancient philosophers and in Gassendi and Hobbes among the modern. It is curious how Hobbes, observing Descartes' affirmation that soul is a substance, concluded from these very words that it is a body.

Positivism is opposed to both materialism and spiritualism, emphasizing relations rather than substances. One philosopher, Meyerson, has criticized positivism as not being faithful to the ideal of science because, according to him, science seeks underlying permanences. But, as we shall see, he appears to be wrong in his interpretation of science, and positivism, in insisting on the existence of relations, sees much more clearly what science tries to do.

✓ We have already seen three important possible criticisms of the idea of substance. From the logical point of view, it has been said that Aristotle and Leibnitz had a too restricted view of propositions. From the scientific point of view, substances are to be replaced by relations. And from the metaphysical point of view, it has been said (by Hegel, Bradley, and Nietzsche) that there is only one reality; or that there are different types of substances and not one but many ideas of substances.

Naturally, the most superficial criticism is that based on considerations of logic; for, although it is right in its negation, it is not altogether right in its implication that one may conclude from logic

to reality. And we might say the same with regard to the scientific point of view, which implies a questionable correspondence between science and reality.

Nevertheless, both are valuable if they are meant to point out the inadequacy of the concept of substance to reality.

We must now ask ourselves what the origin of this idea of substance is. It would seem to have three origins. Why has man been led to conceive substance? First, because what he finds before him presents itself under the aspect of objects or things; action is possible for him only in a world in which there are different totalities. I have to distinguish tables and chairs and trees in order to find myself in this world. And the child imagines that things contain within themselves some kind of spiritual kernel. But how can this come about? If we think about the matter, we shall see that this idea presupposes another. If there were only things, we should probably not find them. We project ourselves into things. When I say that this table is a thing, I conceive it, in a certain manner, in the form of a living being. I conceive it as a totality, and I conceive totality only because there appears to be this spiritual kernel of which we have spoken. Consequently, it seems probable that, in order to conceive things, we project ourselves into them. Thus, the first origin of the idea of substance, the consideration of things, reveals another origin, which is psychological. It is because I conceive substance in myself that I conceive things as substances. But why do I conceive myself as a substance? First, because there is in me a feeling of a certain permanence and continuity. It is not, in fact, necessary to believe that this permanence is absolute; it is probably only a certain mass of phenomena more stable than the others. There are some bodily feelings that a man finds relatively permanent in himself and that constitute the basis, at least the bodily basis, of his personality. And we might call this, in the most proper sense of the term, his substance. Then there are some sensations and feelings that come again and again, that are present in us at nearly every instant. So the relative permanence of substance is complemented by a renewal of certain phenomena. Moreover, in expectation, hope, regret, and remorse we feel the deep relation of our present to our past and our future, and in will we feel this in a more active manner. In hoping or willing, and even in being disappointed, we feel we are the same, and affirm our identity, al-

though implicitly. But there is still another element. The psychological substance is not only this substratum that we have called substance proper, it is not only this renewal of certain feelings and sensations. It is also a kind of perfection—what Aristotle called *entelechy* and what we might call *superstance*, an achievement in living beings of what we find in works of art, which are, in a certain manner, in themselves and for themselves.⁶

Still, behind this objective origin in things and this subjective origin in ourselves, the idea of substance has a logical origin, on which both Aristotle and Leibnitz have insisted. If we conceive the idea of substance, it is because each time we speak we formulate propositions, and the simplest form of proposition is that which links a subject and an attribute. And so we say to ourselves that if there is a subject in the sentence, that subject must be a substance. It is in this manner that Leibnitz was able to deduce his whole philosophy from the affirmation that every predicate is inherent in a subject, and in Aristotle also we could find a similar relation between the logic of the proposition and the idea of substance. Moreover, the needs and exigencies of society certainly influence the development of the idea of substance. Society wants us to be conscious of our identity so that we may become conscious of our responsibilities.

The logical and the social origins of the idea of substance permit us to see how this idea has to be criticized. Not every proposition, in fact, has the form of the relation between an attribute and a subject, as it was interpreted by Aristotle. We might even question whether everything in the world is susceptible of description in the form of propositions.

So we have to come back to the second element of the idea of substance, the psychological, in order to see what is real in substance. Nevertheless, it is true that we have to take account of the efforts of science to find relations everywhere and to substitute the idea of law for the ideas of substance and cause. We have already seen what Kant and Leibnitz have said on this point and, after them, what Brunschvicg and Cassirer have emphasized. We might even say that science will tend toward the discovery of subtler and subtler relations, of more and more tenuous structures.

⁶ We might recall here the Aristotelian definition of Goclenius. Substance is the act or perfection of a being.

It remains true, however, that there is also a need for an effort in the opposite direction: to return toward what is more profound, toward what is nearly or even completely ineffable in experience, toward a feeling full of opacity and thickness.

For it seems probable that the idea of substance as we ordinarily conceive it is a kind of compromise between these two tendencies, one toward dense substructures, the other toward tenuous weavings, and that it has all the defects of compromises. The human mind, if it wants to see the real, must leave the compromise in order to go in one or the other of these directions, or in both of them successively.

So, having spoken of the tendency toward finer relations, we must now turn to the darker side of substance.

Let us here mention that the French philosopher Maine de Biran, who fought against Descartes on the one hand and Hume on the other, and continues rather in the tradition of Leibnitz, has perhaps a particular importance for the future development of the idea of substance. He cannot be classified either as an empiricist or a rationalist, any more than Berkeley, who shows some of the same tendencies. According to Maine de Biran, the idea of substance comes from our observation of our own activity. Hume denied substance because he failed to pay attention to the more real aspects of man's experience in performing an action on his own body and through his body on the external world. Man does not know how the mind works on the body; but there is an immediate relation between mind and body, which is not the less real because it is not understood and not translatable into objective propositions. It is because Hume tried to translate everything into terms of intelligence and sight that he could not take account of the more profound relations and saw only disconnected events. But, in fact, even in Hume's philosophy there is a place for phenomena, such as habit, that are not reducible to disconnected events.

We might find observations very similar to those of Maine de Biran in Whitehead, who tells us that the other senses give us a much more intimate idea of reality than the sense of sight and insists on what he calls causal immediacy. So we end by retaining the psychological, non-intellectual idea (or rather feeling) of substance and trying to do away with the logical, intellectual element.

What is at the origin of the intellectual idea of substance is not

only sight, but hearing, or at least that mixture of sight, hearing, and reflection that is at the root of grammar. Now that we know that not every proposition is reducible to the form subject-verb-predicate, we cannot start from such propositions to study reality. The English philosopher Bradley has pointed out that in propositions we artificially separate and then artificially reunite what is one in reality. I say, "The rose is red"; but in reality 'rose' is not the subject and 'red' or some other color the predicate, for the color is comprehended in the subject. In other words, reality is always beneath or beyond relations, as Bradley and Bergson have shown.

James and Whitehead were right in separating themselves from the empiricists as well as from the rationalists, asserting against both of these schools the reality of relations, or, more precisely (as Bradley too had seen), the inclusion of relations into a felt totality.

So it would seem there are not, in reality, the separate, clear-cut substances about which classical philosophy has so much to say, but relations or terms, nearly ineffable, or rather something that at the same time transcends terms and relations.

For Aristotle, substance was essentially what can be expressed in language; but we may question whether reality can be expressed, and perhaps we shall have to replace the idea of an expressible substance by the idea of an inexpressible, an ineffable substance, or even to replace the idea of substance by a feeling of substance. Contrary to the classical theory, according to which substances are effable, we should say that, whether they are persons or things (which are still kinds of personal beings), they are ineffable. Opposed to the rationalistic substantialism of Aristotle and Descartes, we have an irrationalistic substantialism, which knows about substance that it is and feels what it is.

The substances that are objects of thought can be only relative. The absolute substances are felt substances.

As for the problem of the communication between substances, so difficult to solve when substances are conceived as completely separate, it ceases to disturb us when we think of substances as effluences, influences, and effulgences. On this point too Whitehead and Heidegger, from their very different starting points, come to a common view. Whitehead maintains that, notwithstanding what Aristotle has said, there is no substance that is not present in another, and Heidegger speaks of the 'openness' of existence.

Naturally, to solve the problem of substance, we shall always have to ask ourselves on what level of experience we take our stand. For a physicist, the question of substance does not present itself in the same form as it does for one who would remain on the plane of common sense, or for one who would return to a more concrete vision than that of common sense.

We have seen also that there is a dialectical movement of the mind, a constant passage from properties to substance and from substance to properties, uniting and separating them ceaselessly.⁷

Notwithstanding these last two observations, whether we tend toward the union or toward the separation of substance and properties, whether we tend toward the more subtle interpretation of substance or toward that deep feeling we have tried to describe, we are very far from the common view of substance, and we reach the realization that there is something that is substance, but that this something cannot be thought in the ordinary sense or described; rather, it reveals itself in moments very near unconsciousness. Here, as in every other case, we have to seek the truth, but also to know that there is a limit to this quest and that this limit is still truth.

If, finally, we had to choose between the acceptance and the rejection of the idea of substance, we should even have to go so far as to reject it; it has brought so much mischief to philosophy—as much perhaps as the ideas of Being and of cause. We can accept the idea of substance only if we give to this acceptance the value of a non-acceptance of the ordinary idea of substance. We have to drop the ordinary idea of substance in order to communicate substantially with what is substantial in things.

⁷ We may easily see that such a question as that of substance is related to a great many other philosophical questions: the problem of unity and multiplicity, the problem of language, the problem of relations, and the essential dialectics of the mind.

[1]

IT IS in the poem of Parmenides that we find for the first time philosophical affirmations about Being. According to him, Being is a whole, perfect, and unchanging by consequence of this very perfection. He says that this Being has the form of a sphere and is completely homogeneous, and, moreover, that the thought of Being is the same as Being. And so we see how behind the material conception, which seemed to be expressed by the idea of the sphere, there is a rationalistic and idealistic theory.

Parmenides formulated his theory in order to oppose the conception of Heraclitus, who denied Being and affirmed only Becoming.

But the result of these two opposed doctrines, the one of rest, the other of movement, was sometimes nearly the same. For it seems that the consequence of the theory of Heraclitus was the sophistic affirmation of Protagoras that man is the measure of all things and that there is no objective truth, and the consequence of the theory of Parmenides was the sophistic saying of Gorgias that if there were some Being we could not know it, and if we could know it we could not express it.

Socrates, in thinking about the conditions of moral judgments, found that we must affirm some realities, which he called, as we know, the Ideas. With Socrates, Being ceased to be considered as a subject; such predicates as good and beautiful became the real Being.

A danger in Socrates' approach to the problem became apparent in some of his disciples. For the Megarians completely separated the elements of the sentence and ended in the denial of the possibility of judgment: they said that a thing is what it is and nothing else. Therefore, the subject is the subject and cannot receive any

predicate. For example, a horse is not white, is not running; it is simply a horse.

So Plato had to vindicate against Heraclitus the reality of some stable objects of thought; against Parmenides the possibility of distinguishing several objects, and even of admitting change in some parts of the whole, and against the Megarians the possibility of formulating judgments by establishing relations among different ideas.

According to Plato, not only is there an intelligible world, but sensible things *are* also in a certain sense. This is one of the teachings of the *Phaedo*.

In the *Republic* we see, even more clearly than in the *Phaedo*, the whole Platonic scheme, in which Being is essence and value.

It seems that after this dialogue Plato saw that the term 'Being' had to be analyzed more carefully. In the *Parmenides* Plato shows that we have to free ourselves from a material conception of Being, he has to struggle against the tendency of the mind to confuse the different meanings of the word 'to be' (for sometimes it simply relates the elements of the sentence, sometimes it is an affirmation of reality), and against the Megarians he has to prove that Being is not something fixed and material, but is essentially a relation. Once he has left behind the One that is not, he has to find the way toward the One that is, which is first conceived in a chaotic manner, then in a more orderly mode of existence.

Let us summarize the argument of Plato at the beginning of the second part of the *Parmenides*, in which he considers the thesis of Parmenides, the hypothesis, as he calls it, according to which the One is. If in this sentence I emphasize the One, the One in its absolute oneness, I can say nothing about it except that it is One, and indeed I cannot even say that it is, since to say that the One is, is to add the idea of Being to the idea of One and so is to have two instead of the One. This is the first interpretation of the sentence. But if I now emphasize the 'is' as well as the One, then I have two things—three, indeed, since there must be a relation between the 'is' and the One—and even more than three, since there will be a relation between this relation and the One, and so on, *in infinitum*. In a third attempt Plato studies briefly the instantaneous passage from the first hypothesis, in which we arrive at a oneness so pure that it is very near to Nothingness, or even is Nothingness itself,

to the second hypothesis, in which we arrive at a One so complex that we can say of it everything, even that it is not One. Plato next follows the consequences of the two hypotheses, the first leading us every time to ineffability and Nothingness; the second, on the contrary, being able to lead us, thanks to a richer interpretation of the idea of the One, toward a comprehension of the order of the universe, constituted by the subordination of a rich multiplicity to an organizing unity, which is not other than the Idea. Of course, many interpreters of Plato, arguing from the sophisms manifest in the course of the dialogue and from the last sentence of the *Parmenides*, which seems to be a condemnation of the whole work, have maintained that all this is not to be taken seriously. But we prefer to think that this dialogue marks a turning point in Plato's thought and that the second part, which we have summarized, gives the solution of the difficulties that Plato encountered in his theory of the Idea, difficulties that are presented by Parmenides at the beginning of the dialogue.

In the *Sophist* Plato says that the Idea of Being presents as many problems as the Idea of Not-Being. Being is not reducible to any other Idea. When I say that a thing is, I add something to it. In fact, Being bears a relation to all the other Ideas, which participate in it. And thus, by the analysis of the *Sophist*, the judgment, whose possibility the Megarians denied, is rendered possible.

When Aristotle defined philosophy as the science of Being, he implied that this is the richest and most real of Ideas. But at the same time he showed in a masterful manner that 'Being' has different meanings according to the different sentences in which it is used, and that it is not even one idea, except by virtue of what he calls analogy; that is, it has the same relations to different ideas without having in itself an identity, or, we might say, pressing his observation a little farther, a being. Moreover, there will always be this difficulty: there is a Being (the real Being) and there are real beings. What is the relation between them?

To explain the multiplicity and the movement of the world, Democritus found a way different from that of Plato. Probably starting from the idea of the Eleatic One, and seeing that if he accepted it he had to negate movement and multiplicity, he asserted that besides the One, which is identical with Being, there is Not-Being; it is only because the continuity of Being is divided, by virtue of the

existence of Not-Being, that movement and multiplicity are possible.

The idea of Being has not only a Hellenic but a Hebraic origin. God says in the Bible, 'I am that I am' and places Himself over and above all creatures.

The work of the Middle Ages on this point consisted in uniting the teaching of Aristotle and the teaching of the Bible.

Then came Descartes. One might say that Descartes unites in a certain manner the Platonic tradition of the Good and the Biblical idea of an all-powerful God who is the creator of everything. Naturally Plato conceived the Good as the source of everything, though one cannot say the same about the Demiurge of the *Timaeus*. In Descartes, for the first time the fusion is accomplished among perfection, infinity, and will. Moreover, in Descartes Being becomes more subjective, more connected with the subject, than in Plato. It is grasped first in our own thought. And we have already seen how Descartes presents the hierarchy of Beings as constituted according to their different degrees of perfection.

Classical metaphysics from Plato to Descartes and Leibnitz was dominated by this conception of Being as predicate. With Kant, Being, which had been considered as the universal subject by Parmenides, then as objectified predicates by Plato, was considered as a verb. Kant's view is presented in his criticism of the ontological argument, that is, the argument by which Descartes, following Anselm, proved the existence of God from the fact that the idea of God is the idea of a perfect Being. According to Kant, when I say that something is, I do not add anything to the thing; and the difference between ten imaginary dollars and ten real dollars has nothing to do with a conceptual difference. The concept of the imaginary dollar is absolutely the same as the concept of the real dollar; it is only that one is and the other is not. And how do we see that a thing is? Only by seeing that it is integrated in the whole of our experience as this is constituted by the application of forms and categories. Now God is not found in experience in this sense; He is a thing-in-itself, a noumenon, whereas our experience can be only an experience of phenomena.

With this observation the whole rationalistic scheme that had lasted from Plato to Leibnitz and that had been so clearly formulated by Descartes was shattered. According to the former scheme, as we have seen, there was a hierarchy of Beings whose summit was

constituted by the most perfect Being, which, because of its very perfection, existed necessarily, and existed in a much stronger sense than every other being. According to Kant, on the contrary, there is no such hierarchy of Beings, everything that exists, exists with the same right, and the existence of God is even less certain than the existence of the other beings

We must add, nevertheless, that, according to Kant, we may affirm by the practical reason the existence of God and the soul, which are things-in-themselves, outside experience.

Considering now the whole history of the idea of Being up to this point, we may say that though it has been called the simplest, the richest, and the most real of ideas, each of these three terms may be questioned. As we have seen, Plato shows that this idea is one of the most difficult to study and is not clearer than the idea of Not-Being. As for its reality, it is sufficient to think of philosophies as opposed to one another as those of the Protagoreans and the Megarians in ancient times and of Nietzsche and Bergson among the moderns in order to see that this has been very often denied. It was Protagoras who said that one must never use the term 'Being,' because everything is in constant change. And as for its richness, Hegel has shown that it is the poorest idea. In a famous passage of his *Logic* he asks us to try to represent to ourselves pure Being without any qualification; and he has no great difficulty in proving that if we make this experiment in thinking pure Being, we shall realize very shortly that we have before our mind only nothing, pure Not-Being.

It is true that Schelling opposed Hegel on this point and, in founding his positive philosophy, tried to show that over and above all intellectual concepts there is Being, something that cannot be expressed but is nevertheless the source of everything. Schelling's philosophy had a great influence, from it Kierkegaard derived some of his expressions and even some of his tendencies.

We must add also that, though Hegel said at the beginning of his *Logic* that this idea of Being is a very poor one, his own philosophy culminates in the affirmation of consciousness, which he defines as being in itself and for itself. Thus, there are in fact two ideas of Being in Hegel, the one of Being as the poorest, the other of Being as the richest idea; and dialectics takes place between the first and the second.

Can we say that if it is not the simplest, the richest, and the most real of ideas, Being is at least the most general?

But it was Aristotle who showed that by analogy we apply the same idea of Being to many different things. And among contemporary philosophers, Heidegger has said that there are completely different kinds of Beings, which we might call the Being of things represented and seen, the Being of instruments, and the Being of human beings

These considerations may suggest that the idea of Being probably comes from grammatical conceptions, that it is imposed upon us by our language. We have always to remember Bradley's observation that the mind arbitrarily separates the *that* from the *what*, that is, places the subject on one side and the predicates on the other. But, according to him, in reality itself there is no such separation, there is only a whole, which is felt and is not translatable into concepts.

In order to proceed a little further, let us oppose Being to some other notions: appearance, knowledge, Not-Being.

In one sense no idea can be opposed to Being, because everything of which we can think is. However, the human mind has conceived the idea of Being because, thinking always in relations and oppositions, it has opposed this idea to that of appearance. Parmenides has two cantos in his poem, one about Being, the other about appearance or Not-Being. But, as Plato showed, in a certain sense Not-Being is, and we cannot banish it from Being; and Plato showed also that any Being is defined only because it is what it is, and is not what it is not, that is, because it is not some other Being. In other words, the negation is implied in the very affirmation of any particular Being

In this manner Plato refuted the thesis of Parmenides, whom he respected so much. This thesis has been taken up again by Bradley, who opposes the absolute Being to the appearances in a manner not very different from that of Parmenides. However, Bradley completes and corrects the theory by maintaining that the Absolute is present in the appearances and even that the appearances, when they are, as he says, transmuted, constitute the Absolute.

There will always be a kind of antimony in this idea of Being, since Being has to be separated from all other things and at the same time has to include them. If we take the first direction, if we tend to separate Being completely, we tend toward a negative

ontology (analogous, in relation to Being, to negative theology in relation to the attributes of God), of which the first hypothesis of the *Parmenides* gives us an idea, and also the passage in the *Republic* in which Plato speaks about the One above every determination, and if we take the other direction, we have the philosophy of Hegel and of Bradley, with their all-comprehending Absolute. Such are the two views of Being between which the human mind is divided, and it is this very tension that makes the life of the spirit.

Thus, it seems that Being as an idea is a product of grammar and language, and at the same time that there is, nevertheless, a real feeling of Being, but of a Being that cannot be expressed, except by antitheses, a Being that can only be experienced.

We may now ask ourselves what the relation is between Being and knowledge. We remember what Parmenides said about the identity of Being and knowledge. In fact we might find traces of this Parmenidean thought in the philosophers who succeeded him, and particularly in Plato. According to Plato, knowledge is participation in the Ideas, which he conceived as the real Beings; and, just as both the growth of sensible beings and the possibility of their being known are dependent upon the sun, the source at the same time of the heat by which they grow and of the light in which they are seen, so both Being and knowledge derive from some common principle—an intelligible sun, as it were.

When Descartes took up the question of the relations between knowledge and Being, he first formulated the thesis: 'I think; therefore I am,' in which he concluded our Being from our knowledge of ourselves. More generally, he asserts that it is valid to reason from knowing to Being. Anything that is conceived clearly and distinctly by our reason exists. However, this does not mean that thought creates Being. It means simply that thought sees Being as it is. Furthermore, Being owes its existence to a supreme Being, which is the perfect and infinite thought.

Whereas Descartes insisted on the thinking thought, Malebranche emphasized rather the object of the thought, that is, the ideas. According to Descartes, these are evidently present to us because God has put them into us; but Malebranche gave them a much higher status, placing them in God Himself as the content of His understanding.

In Kant's treatment of this question too we may observe a kind

of revolution, since, according to him, an object is transformed by the very fact that we know it.

This leads us to a general observation. An idealism like that of Kant is founded on a certain theory about relations according to which a term is transformed when it enters into a new relation. When something is known, it enters into a relation with ourselves and so, according to this theory, does not remain the same as it was before. A realistic theory, on the contrary, holds that terms are not changed when entering into a new relation.

So we are in the presence of two kinds of theories, one affirming that the terms remain as they are, the other that the terms are changed when they enter into new relations, and both kinds of theories may be rationalistic. From this point of view we have on the one hand the rationalism of Plato, Descartes, and Leibnitz (though it is rather difficult to put Leibnitz in a very definite class), and, on the other, the rationalism of Kant.

So far we have considered only the theories that, in the problem of the relation of knowledge and objective Being, emphasize knowledge. But there are philosophers who, on the contrary, insist on the objective and even on the material conditions of knowledge, which they find in material Being. They are the ones whom Plato represented as the giants—the friends of the earth—in his description of the battle between the friends of Ideas and the giants. Here is a strife of systems that will probably be renewed forever.

As we shall see, we do not have to stop at the subject or the object. Yet, supposing for a moment that we can separate them, we have to ask for their conditions. Notwithstanding the absolute priority Descartes gave (or seemed to give) to the *cogito*, there are presuppositions of the *cogito*. Not only its object, as Malebranche implied, but perhaps its material conditions, as they were interpreted, rather coarsely it is true, by Hobbes and Gassendi, have to be taken into account.

And as for the object, it too has its presuppositions, whether consciousness and the self, as the idealists say (and this I doubt), or time and space, as Alexander says (and this I doubt also), or rather a general scheme of compresence and prehension, as Alexander, in some passages, and Whitehead have suggested, and of distance. Compresence and distance—these would be the ultimate conditions of Being, or at least its characteristics.

But we must ask ourselves whether we do not have to go beyond this distinction between subject and object and return to a more immediate and primitive view of things.

This very brief survey of the history of the question permits us to draw some conclusions. The idea of Being, by virtue of its very generality, is necessarily one of the most difficult to define. It may even be divided into different forms of Being, as philosophers from Plato and Aristotle to Bergson and Heidegger have shown. In fact, it may be doubted whether ontology as a science of Being is at all possible. We have seen, besides, the advance from the comprehension of Being as subject to the comprehension of Being as predicate and, with Kant, to the comprehension of Being as verb, but we may question the validity of every one of these interpretations, since they are clearly interpretations in terms of our own grammar, our own thought. Finally, we have to take account of those who have negated Being, whether in the sense of Protagoras and Nietzsche, by replacing Being with universal Becoming, or in the sense of the *Republic* of Plato and of the negative theology, by substituting for Being something ineffable, which has such a fulness of Being that it cannot be expressed and is nearer to Not-Being.

We have here an example of the dialectical movement of the mind in the presence of the idea of Being, affirming it and then negating and destroying it.

Before we go further in the study of Being, let us consider its relation to time. Alexander says that every being is a particular part of Space-Time. But this definition fails to do justice to the essential nature of Being and to the order of our reflections, for we do not yet know what space and time are. However, we have to observe that there are close relations between the problem of Being and the problem of time. For Plato (in the *Phaedo*), real Being is outside time. According to Descartes, the simple natures, which are for him the real elements of everything in the world, are in the instant. But naturally he has to connect these different instants, which he has so completely separated from one another, and this he does by means of the idea of God. To all these conceptions, which put Being outside time, whether in eternity or in the instant, we may oppose the Bergsonian conception of Being as perpetual change and what Bergson calls duration.

But this problem of the relation of Being to time cannot be solved before we have examined the ordinary conceptions of time; and then possibly we shall be in a position to see that time is not the separating element it has been conceived to be, that it essentially permits the influence of things upon one another and the radiation of things into one another. And perhaps the new theories of time and space will enable us to see things in a much more complex and compact presence than they have appeared in hitherto.

Returning to our study of the idea of Being in itself, we may say first that Being manifests itself by the resistance it opposes to us. This is true even in the intellectual realm, where something that is, is something of which I cannot make what I want, which I cannot change according to my will. And this is still more obviously true in the physiological and the physical realms. Thus, Being is never completely transparent to knowledge, in a certain sense it resists knowledge. This is the principle that is emphasized by at least some kinds of realism, and we see how completely different Being, interpreted in this manner, is from the Being of Parmenides, which was identical with knowledge.

But the moment we think Being, we unite ourselves with it. So there is in this thought of Being a union of resistance and union.

But what is this Being, which is able to unite itself to thought at the same time that it opposes itself to thought? Here again we may recall the provisional definition Plato gave of it in the *Sophist* when he said that it is an acting force, an influence.

And—to return to what we have said about time and space—we shall probably be able to explain this acting force by the fact that the space and the time that were presented to us by classical science are not real space and time, and that Being, if it radiates, does so because it is never uniquely where it is, but is at the same time, so to speak, at different places in space and at different moments in time.

We have already said that there are different kinds of Beings. As we have seen, there is not one idea of Being, but many different ideas. We have gone still farther and have said that these ideas always tend to affirm something that is different from them and that is precisely Being, in so far as it is not an idea. Naturally, these non-ideas, the moment we think of them, send us back to ideas. So the idea of Being sends us toward Being, and Being sends us

toward the idea. Being exists only in judgment, but judgment exists only because it aims at something that is different from judgment. The life of the mind consists in positing Being, then in destroying it, then in reconstructing it. We posit an absolute, then we render it relative, then negate its relativity. But we must always remember that all these words are only symbols, and rather clumsy symbols, and that consequently one cannot build a philosophy upon this idea of Being, because in one sense it is the most empty of ideas; these symbols have meaning only because they are directed toward something that is different from any idea and particularly from the idea of Being.

There is an exchange between our mind and that which is the limit of our mind, that which allures it and nevertheless can never be completely reached by it. Finally, we have the feeling (in a negative form) of not being nothing, and this is the feeling of our being in the world. The idea of Not Not-Being is the translation of our feeling of Being. We are in the world, but each word in this sentence is only a pale abstraction. And here and elsewhere words take their value from their contact with what is not a word.¹

[2]

At the beginning of his *Phenomenology of Mind*, Hegel presents a criticism of the theory of the empiricists. According to him, they give us only generalities. The empiricists say that the truth can be found in the here, in the now, in the self; but each of these ideas is very general, since, for example, the now can be applied to every moment of my existence. Perhaps we might criticize in its turn this criticism of Hegel, which does not take account of the real essence of language, inasmuch as it always refers to a reality and in this case designates something.

Hegel made this criticism because he wanted to maintain the idea so essential to classical philosophy and so clearly expressed by Plato, that the real things are not the sensible but the intelligible things, although in the last phase of Plato's philosophy we might find a tendency to reinstate the sensible and to show in it a kind

¹ When some philosophers have insisted on the contingency of Being, its irreducibility, they have probably meant what we have said in another way, that is, that there is in Being something that cannot be reduced to pure intellectual reason.

of perfection and stability. Nevertheless, it is not this aspect of the Platonic theory that has ordinarily been stressed, and in the interest of our brief history of the idea of existence, we may mention Plotinus, according to whom existence is a fall, a process of detachment from the One.

The metaphysics of Christianity took the same direction. In fact, although it was an act of falling, existence was for Plotinus a positive act, a positive detachment from reality. This was a step toward the Christian conception. On the other hand, and going a little backward in our survey of history, we may note that Aristotle, when he said that man comes from man, and not from the idea of man, as the Platonic philosophers seemed to say, also gave hints of a conception that prepared the way for the Christian doctrine. With Christianity and its theory of incarnation, existence, although it is, as we have said, a descent and a fall, nevertheless acquires a new value. In Christianity man was conceived for the first time as a union of the finite and the infinite, since the Son of Man, i.e. man, is an incarnation of the infinite in the finite.

Perhaps more attention should have been paid to the *sum* ('I am') of Descartes, although he comes to it by the intermediary of thought. I am. This is nothing like saying: ideas are, nor is it to say something like: God is; although in a certain sense the ideas, and particularly God, the idea of perfection, are implied in the doubting, in the thinking Me. It is simply to assert: I am.

When Leibnitz said that in order to pass from possibility to existence something has to be added, which he called the complement of possibility, he too was emphasizing this synthetic aspect of existence.

Curiously enough, it was the empiricist philosopher Hume who closely united the two ideas of belief and existence, saying that every belief is a belief in an existence and that existence is the content of a belief.

The decisive step on this point was taken by Kant when he said precisely the contrary of what Descartes had implied. Existence is not the thought of existence. It is a position and not a predicate. It is important also to notice here that existence for Kant is accessible to the practical rather than to the theoretical reason.

Schelling took up again some doctrines of Plotinus but added to them a kind of metaphysical empiricism. He saw existence as the

positive element, which cannot be derived from any purely intellectual consideration.

As we have intimated, the philosophy of Schelling was particularly important, in the historical sense, because from it is derived, at least in part, the tendency that expresses itself in Kierkegaard. What is existence for Kierkegaard? It is nothing that can be expressed objectively, it is only experienced, in the intensity of our feeling when we are in contact with what he calls transcendence or the Absolute Other. But in order to understand the conception of Kierkegaard, we have to mention the conceptions of Hegel, first the friend, then the adversary of Schelling. We have already seen how Hegel criticized empiricism. More generally, there is, for him, only one kind of existence—the whole, or what he calls the Idea. Everything exists only by virtue of its relation to a whole: for example, one of my feelings exists only because it is integrated into my life, or, to take another example, an animal exists only by its relation to its species. My mind itself, in relation to which my particular feelings have their reality, exists only because it is related to the culture of which I am a part, to the books I have read, in fact to the work I do, to my function and profession, and this in its turn has its reality only because there is a state of which I am a part. This state in turn is only one part of the great development of history, that is, of the one Idea, which exists only as it is explicitly manifested in history (although in one sense this universal Idea—this Concrete Universal of which all the other concrete universals, such as states, persons, works of art, et cetera are only parts—exists in the beginning of things as well as at the end, that is, exists eternally).

It was against this scheme that Kierkegaard revolted. He does not want to be a part, even of such a wonderful whole. He is an individual, and what he called an existent individual, having the life of his mind essentially in its relation to something he cannot understand by reason, something that is not a whole but an individual—God Himself. The philosophy of Hegel was religious in one sense of the word, since he thought that Christianity is the symbol of the rationality of the universe and of the high place that has to be given to human reason. But, according to Kierkegaard, this interpretation is not religious at all, since it makes of religion a symbol of a higher truth, which is a kind of negation of religion. Kierke-

gaard believed that we have to unite ourselves to Jesus Christ not as the expression of mankind in general, but as an individual who suffers at the same time that He is the Infinite Deity.

But in order to be united with Jesus, we have first to feel ourselves as separated from Him, that is, we have to feel ourselves as sinners, because it is in this consciousness of sin that we have the deepest consciousness of ourselves as existent.

Sin in its turn can be explained only by the attraction of something which we see very dimly and which we might more properly call nothing than anything precise. The possibility of what we desire hovers before our eyes and in a kind of anxiety draws us toward the forbidden action.

According to Kierkegaard, this consciousness of sin is the way to the higher stage of life, which he calls the religious life as opposed to the life of the man who seeks only his pleasure and of the man who obeys his moral duty.

It is Kierkegaard who gave to the term existence the meaning it has kept in the subsequent so-called philosophies of existence and who closely linked the feeling of existence with the feeling of transcendence. We might find in the philosophy of Jaspers echoes of the same tendencies, but more intellectualized and generalized. It is no longer a question of relation to Jesus, but to an obscure background of which we have a feeling, but which we can never grasp except in partial and fugitive moments, so that finally we succumb and are in a certain sense wrecked in our pursuit. Yet we have to strive for this in order to be really ourselves, when we come into contact with what Jaspers calls a 'limit situation,' i.e. one in which we reach our utmost bounds. Then, in our non-accomplishment, we reach our one and real accomplishment.

Heidegger, who is often represented as one of the philosophers of existence, thinks that he is not one of them, for he says that he is essentially interested in Being and that existence is for him only a particular structure of Being. Nevertheless, the fact remains that in the first part of his great work—the one part we have—he defines the structures of existence in particular and not the other structures of Being. The analysis of existence, i.e. of man, is our way to an understanding of Being. Existence is, for him, essentially care-ridden, intent on itself; man exists essentially in anxiety. Existence for Heidegger, as for Kierkegaard, is transcendent, but not toward

the same terms, for Heidegger, there is no God, and we are bound by our finitude. But within this finitude we pass outside ourselves; we transcend ourselves because we are essentially in time, that is, always making projects and living in advance of ourselves, and always in the world, that is, in intimate communion with other things.

We are in time and in the world (in this sense) because we ourselves have in a certain manner transcended, that is, separated ourselves from, Nothingness in order to exist. Here the idea we found in Plotinus, that existence is separation, is taken up again, but it is no longer separation from the absolute One; it is separation from complete Nothingness.

Existence is always directed toward the future. According to Heidegger, existence is what has to exist: as he says, it is Time and Care. It is directed toward its possibilities and is essentially problematic. But these possibilities are not abstract, they are embedded in particular conditions that have not been chosen by the individual. In this way the future is related to the past. And this relation of the future to the past, the future toward which we direct ourselves and project our thoughts and the past which is imposed upon us, constitutes the present. We thus see how time defines existence, and existence time. In fact, they are the same. But we do not always realize this real existence; often we remain in a superficial mode of life, which Heidegger calls—let us translate—the ‘undifferentiated’ way of life, the way of anyone, meaning by ‘anyone’ every one of us in his most superficial moments.

Nevertheless, real philosophy and real existence coincide, since philosophy is understanding of real existence.

For Heidegger and his disciples, we reach real existence only by passing through certain experiences that reveal something of the world in general. We have already seen that the world, being essentially linked with existence, detaches itself from Nothingness. Now some feelings reveal to us at the same time both the world in general and Nothingness, this is particularly true of anxiety, the importance of which Kierkegaard has stressed, but rather from the psychological side. Heidegger gives to anxiety a kind of meta-physical or ontological status, since he sees it as the revelation of this primeval universal Nothingness.

Certainly many of the indications of Kierkegaard and Heidegger

will be useful for a philosophy of existence. However, some of their affirmations are questionable. Heidegger enumerates as three aspects of existence the project toward the future, the being conditioned by the past, and what we might call the essential fallenness of man. But it seems that the third element implies a certain conception of man. This idea of man as in a kind of dereliction implies some presuppositions that Heidegger has specifically denied. Man can feel himself a derelict only if he thinks that he is 'derelicted'—by God. So we find ourselves in this strange position: if we push Heidegger's philosophy to its logical conclusion, we have to do away with some of the most essential feelings that characterize the work of Heidegger. We might say that Nietzsche is more consistent on this point than Heidegger, that the idea of God is more definitely absent from Nietzsche's philosophy, at least from some parts of it. We might even say that Heidegger moves in the world of Nietzsche with the feelings of Kierkegaard and in the world of Kierkegaard with the feelings of Nietzsche.

What we have said refers to the third aspect of existence but can be extended to the second. The character Heidegger has ascribed to the past seems illogically tinged with the dark colors of pessimism.

We have seen the importance of feelings like anxiety in Kierkegaard and Heidegger. But are these feelings, or the feelings of ennui and of nausea, which two followers of Heidegger, Levinas and Sartre, have chosen as particularly revelatory of the world, entitled to such a privilege? According to Heidegger, all human existence is oriented toward death, which he cleverly defines as the impossibility of possibility. Indeed, this orientation toward death is part of the very definition of existence. But we may well wonder whether the thought of death has such a prevailing importance and whether hope as well as the thought of our essential finitude does not have to be taken into account.

Moreover, some notions have perhaps been insufficiently analyzed, such as that of possibility,² which has as much importance in Jaspers as it has in Kierkegaard and Heidegger. As for the notion of Being, we may even question whether the opposition that is drawn by Heidegger between what he calls the ontical and what he calls the ontological is not, at least in some of his disciples, a kind of artificial

² Nevertheless, one may find an analysis of possibility in Sartre's *L'Être et le néant*.

manner of distinguishing Heidegger's philosophy from that of others. (We might even say that from an existential standpoint ontical considerations ought to prevail over ontological ones—a line of thought hinted at in certain passages of Sartre)

If we now consider the idea of existence and remember what has been said concerning Hegel's criticism of the now and the here, we may observe first that what we find ourselves confronted with is not a pure sequence of sensations, as the empiricists believed and as even Hegel said in criticizing them, but things, objects that are like masses of particular properties concentrated in a given appearance and giving us the feeling that they have a kind of kernel or center. We are in the presence not of a world of pure appearances, but of a world of things.

Starting from this world, we can pass to one of its presuppositions. There are such centers before us because we ourselves are centers. So from the existence of things we pass to the existence of thought.

Naturally, there are different conceptions and even different realities of thought. It may be conceived as a kind of impersonal transparency, as by James, or as a kind of act by which we aim at things, as by the phenomenologists. Even in Descartes we may find different conceptions of thought, since sometimes it is every state of consciousness and sometimes only the clear and distinct ideas. But for the moment it is rather thought as the act of aiming at other things that we shall choose as our conception. As for impersonal thought, that of Descartes as well as that of James, it is, from the point of view of the philosophy of existence, something to be left for the moment in the background. For, as Kierkegaard says, there is a kind of fight between this impersonal thought and existence. According to him, the more I think in this impersonal manner, the less I am.

It remains true, nevertheless, that thought has a function in the conception of existence, since there is a kind of tension between thought and existence, between what we might call existential thought and existence, and in a certain sense this tension and struggle defines existence itself.

But there is not only thought in man. This personal thought of which we have spoken implies feeling and will. Certain philosophers, otherwise very different from one another, such as Hume,

Bradley, and Gabriel Marcel, have insisted on the existence of man as a feeling being. According to Marcel, the feeling on the basis of which I form all my ideas about existence is the feeling of my own relation to my body. We might find a similar theory in Maine de Biran.

Maine de Biran has insisted at the same time on the existence of man as a willing being. Our will, by its very action on something that resists, gives us the idea of existence. And at the same time it gives us the feeling of our union with our body.

We can pass from this observation to the idea that existence is, on the one hand, what resists us, and, on the other, the effort exercised by us on what resists. So existence could be defined either by resistance or by effort, or rather by the relation or the union of both: for both are united at the same time that they struggle against each other.

It should be noted that we may define existence by resistance and endeavor because these two ideas present themselves with a kind of intensity. So we come again to the idea of Kierkegaard that existence is intense.

But this intensity which is existence is probably definable only in antithetical terms.

As we have seen, according to Plotinus, existence proceeds from the One. According to some others, it proceeds from the possible, and perhaps we might quote Leibnitz on this point. According to Heidegger, it proceeds from Nothingness. Pursuing the same idea, we may say that existence is a kind of detachment, a break, even a wound.

But let us observe first that the thing from which existence separates itself is rather a fictitious presupposition than a reality, and this is particularly true of Nothingness and also of the possible. So we might represent existence as constructing this imaginary thing for itself in order to present itself to us as a separated being.

At the same time that existence is separation it is also union, achievement, perfection. This is one of the ideas of the classical philosophers, of Aristotle when he defines existence as act and entelechy, of Descartes when he understands the degrees of existence as degrees of perfection. And we could find ideas similar to those of Aristotle in the philosophy of Whitehead.

Thus, just as we have previously seen that existence is at the

same time the existence of the subject in a state, or rather in a movement, of endeavor and the existence of the object that resists, and even that existence is the existence of the subject which opposes itself to the object and which unites itself with it and that the object at the same time gives itself and refuses itself, so we now see existence as detaching itself and breaking itself and at the same time accomplishing itself and uniting itself to itself. We have made the same observation with regard to Being, but here, in existence, these two processes present themselves with greater intensity.

Jaspers has emphasized the fact, already noted by Kierkegaard and Nietzsche, that existence is choice. But this choice is determined by the datum that I am. I am in a certain sense given to myself. Here we find again the idea we have expressed about existence as separation. It separates itself from things it constructs. And the choice I have is between possibilities that I construct retrospectively. So existence is at the same time choice and datum, choice and no choice. We always come to the same conclusion: existence can be described, or rather circumscribed, only by concepts that appear as contradictory—opposition and union, detachment and accomplishment, choice and givenness.

Existence cannot be deduced from anything, certainly not from that something which classical philosophy called essence. We have already characterized existence by intensity, and now we define it by irreducibility.

Existence, as we have seen it so far, appears perhaps as something too limited, and we have to add that there is existence only if there is a content of existence. There would be no existence if it were reduced to pure existence. My existence is related to that of others. One of the reasons for the emphasis Kierkegaard placed on anxiety and sin and Sartre (in his novel) on nausea is probably that they separated the individual too much (at least at times) from other individuals. On the one hand, it is one of the merits of the philosophy of existence, in opposition to what has been called the philosophy of life or the philosophy of the person, that it stresses not so much continuity as discontinuity. But on the other hand, the isolation in which it has placed the individual is too great. Existence has a content.

On this point we might oppose the thought of philosophers like Hegel and his disciple, Bosanquet, to the thought of a religious

thinker such as Kierkegaard. It is true that Kierkegaard does not deny the Other, indeed conceives a communion between minds, and above all conceives a spiritual love and a spiritual Church. Nevertheless, existence is very often restricted for him to the relation with God. According to him, I am only when I am in the presence of God.

In fact, each of these two antithetical positions, that of Kierkegaard and that of Hegel, has its danger. In the too great intensity of the one and in the too great richness of the other there are nearly equal dangers. It is true, as Hegel says, that we are what we know and think and feel, that we are linked with our culture, with history, and finally with the world, that the romantic idea according to which there are in us beautiful unexpressed feelings leads to a kind of affective laziness and a selfish interiority. But if one takes as his aim his own integration in the works of others, in the contemplation of works of art, the too great richness acquired by such means may have for its consequence a kind of nullifying of the personality.

While thinking that the position of Kierkegaard may lead to a kind of vanishing of the self in a too great and too subjective intensity, we should remember what the mystics have said concerning the value of what they call poverty and the worth of a mind that is enclosed in the unity of a feeling or a thought.

So once again we find ourselves in the presence of the antimony of existence. We have to fill our mind with new contents, but even more we have to keep its intensity, its unity, its tension.

This question leads us to consider briefly the relation between existence and the self. Proust has insisted on the diversity of his feelings and on what he names the *intermittences du cœur*. We might call this an application of the associationist theory to feeling. But Proust teaches us also, by virtue of the very fact of affective memory, that there is a permanence alongside the *intermittences*.

And, speaking of the self and existence, we find ourselves again in the presence of an antimony; for existence is a return to oneself and at the same time a going out of oneself. There may be a vanishing of the self, and this not only in those moments of *affalement*, which Sartre has described, but also in moments of intense plenitude. To render oneself anonymous, to free oneself from one's own ego, is the aim of the mystic. It is also what André Gide has sometimes proposed to himself. A self may exist which is no longer a self. These two moments, of the 'out of oneself' and of the 'from

oneself,' may lead us to conceive a dialectic somewhat analogous to that of Hegel, according to whom the self is the union of opposition and union.

As for the relation of existence to time, we should have to say first that I cannot have consciousness of existence at the very moment when existence exists.

I have the feeling that I have existed or that I shall exist, rather than the feeling that I exist. I grasp of myself only something which is past or which is future. In this sense, we might say that existence may be defined by hope and by regret. I take consciousness of my existence only, so to speak, from the outside, from behind or in advance. I am always at some distance from my existence itself. And this is the condition of man. Man essentially questions himself about his existence, but when he does so, he can only keep silent or dissemble. There is a kind of flight of existence before existence.

Such considerations place us very near the ideas of Jaspers, who thinks that in the end we are led to failure and to a kind of shipwreck.

Nevertheless, existence is not uniquely in the past or in the future. It is rather in the acts by which the existing being destroys himself and constructs himself; existence is always its own destruction and its own construction. The existing being exists in the acts by which, in the present, he constitutes himself as the one who has this future and that past. This is the meaning of the idea of repetition in Kierkegaard, of the eternal recurrence—or, at least, of the individual's affirmation of this eternal recurrence—in Nietzsche; it is the resolute decision of Heidegger; and it is also the act by which the hero of Proust, though rather more passively than the philosophers we have named, joins in himself one present instant and one past instant.³

The existing individual is he who can take his past upon himself, who can assume responsibility for it. In this sense, the problem of existence cannot be solved theoretically. It can be solved only in practice, by the feeling the individual experiences of the union of his past and his future in his ever-new present.

If we also remember what has been said about the interweaving of the moments of time, the fusion of the places in space, we see

³ It is also the 'third realm' of Ibsen's *Brand*

that the isolation of the individual and of the moment cannot be so great as it seems.

What we have performed is less an analysis of an idea than a kind of circumscription of a feeling. And we still have to add that the existence of the I is not the existence of the Thou or the existence of the This. So that here too we see that existence cannot be defined. The existence of the We is not the same as the existence of the I and the Thou.

Thus, there is a kind of conjugation and declension in the term 'existence,' and this is one of the reasons why existence is so difficult to define. We have tried to find the essence of existence, but its essence seems to escape, or rather there is no essence. We pass from the quest for the essence of existence to the feeling of its inessence. Existence can never be completely revealed. It is never so strong as when it is hidden.

The philosophies of existence may be distinguished from the philosophies of life. The followers of the first want rather difficult doctrines and are not satisfied with the too easy (at least in appearance) solutions offered by the philosophies of life. But perhaps philosophies of existence have too sharply separated and isolated the things between which the other philosophies affirmed a somewhat too easy continuity. And perhaps we have to unite what is valid in both these philosophies, discarding what is questionable in each.

Existentialism may be viewed as part of a whole movement which might be seen in other fields as well as in philosophy. For example, it seems that since the end of the last century the appreciation of works of art has been much more closely related to a kind of sympathy with their creators' efforts, although preceding centuries did take some account of the individual characters of painters in evaluating their work. Our admiration for the achievement of Van Gogh and even of Cézanne cannot be separated from our feeling that we are in the presence of their personal effort, as expressed in the kind of brush strokes they employ, and we feel them as men at the same time that we admire them as painters.

It would be interesting to compare existentialism with another doctrine of our times, which has developed particularly in some religious circles in France and which has been called personalism. This doctrine, as it is expounded by certain foreign philosophers

residing in France, such as Landsberg and Berdyaev, as well as by certain French thinkers such as Mounier, stresses the importance of the person not as separate and isolated, in the manner of the existentialists,⁴ but as essentially related to other persons inside a spiritual and, we might say, personal community. The personalists contend that the existentialists do not take enough account of the living relations among living persons and that this is one of the reasons for the pessimistic character of their doctrines.

The question is whether personalism does not offer again too easy a solution of the problem. The distinctions between individual and person, between problem and mystery, are used by the personalists, and also by Marcel, to eliminate certain difficulties; but perhaps a harder, less satisfying doctrine has the advantage of not eliminating problems that seem essential to the movement of the mind.

We might follow a kind of dialectics in the philosophies of existence, going from the religious conceptions of Kierkegaard either to the non-religious ideas of Heidegger or to the religious ideas of certain French thinkers such as Marcel. But perhaps there is some danger in the one direction as well as in the other; for the religious existentialists give, as we have seen, too easy answers to the problems, and as for the non-religious existentialists, they keep certain traces of the religious conceptions which tinge their whole philosophy, notwithstanding their distance from religion. So the task of the philosopher is rather to remain as near as possible to existence, independently of religious or non-religious considerations.

Sometimes he will be accused of presenting a philosophy of despair. But to see the world as it is, is not necessarily to construct a philosophy of despair, although it may appear so to those who think they possess a complete answer to every problem. And we may add that even those thinkers have been led to their answers by a kind of despair. In saying this, we do not in the least condemn them, for this feeling of dissatisfaction contributes to the value of their very existence.

[3]

Reality may be distinguished from possibility on the one hand and from necessity on the other. It is in this sense that Kant understood the term when he studied the categories of modality.

⁴ We should have to except thinkers like Gabriel Marcel

But reality may be opposed to unreality as well. It may also be distinguished from truth, and it is these last two meanings that Bradley gives to the term in his *Essays on Truth and Reality* and in *Appearance and Reality*.

According to him, truth is always partial, whereas reality, as Hegel has shown, is always the whole.

We might say that in a system like that of Parmenides there is an identity of Being, Truth, and Reality. But little by little these ideas have been separated, the first being considered as more abstract, the second as more partial, while the third has been given the character of totality.

Turning now to Plato after these brief terminological remarks, we may note that in the *Sophist* he speaks of Being as a whole. However, he no longer considers this whole, in the manner of Parmenides, as something immovable, but rather as comprehending in itself both rest and movement.

Of these two ideas, which, according to Plato, characterize the whole of reality, some modern philosophers have kept only one, the idea of movement; and then we come to such philosophies as those of Bergson and Dewey, different as they may appear in other respects.

Whether the whole is considered to be in movement or at rest or to be both in movement and at rest, what is important from our point of view is that reality is wholeness and is separated from other concepts, particularly from the concept of existence, which is now conceived as something intense because it is partial and subjective.

We may interpret the philosophy of Kierkegaard as the negation of the concept of reality as this was understood by Hegel and as it was to be conceived by Bradley; and we may interpret the philosophies of Hegel and Bradley as the negation of the philosophy of existence presented in Kierkegaard. So here again we find an antimony, a conflict, a dialectics, and this is what constitutes the life of the mind.

Reality has meaning only if we oppose it to appearances or phenomena. We have already seen that Parmenides separated his poem into two cantos, one on reality and truth, the other on appearances, which he conceived as Not-Being or untruth. To the philosophy of the Eleatics was opposed the philosophy of the followers

of Heraclitus and particularly that of Protagoras, who said that things are as they are seen, or in other words, that the appearances are true and that there is nothing behind them.

The task Plato set himself was on the one hand to admit that the followers of Heraclitus had seen one aspect of the real, but on the other to show that they had seen only one aspect and that there are two kinds of beings, the sensible and the intelligible. Although the sensible beings are founded on the intelligible, Plato nevertheless, as we have seen, designates them as beings (in the *Phaedo*) as well as the others. One might say with A. E. Taylor that the theory of Ideas is the foundation of the reality of the sensible things, which it has often been wrongly interpreted as denying.

When Descartes took up the problem again, he distinguished in the sensible things—in agreement with the science of his time and his own science—what is clear to the mind, that is, extension, and what is unclear, that is, the secondary qualities, which come from the mind and indeed are in the mind. In a certain sense, it is true, every one of these ideas is in the mind, but what is unclear does not correspond to anything independent of particular minds, whereas the clear and distinct ideas do.

This was to be the starting point of two of the greatest followers of Descartes: Spinoza and Leibnitz. Spinoza showed that, the deeper we go toward reality, the more the particular appearances vanish; and Leibnitz presented a world of rational common sense and science made of what he called well-founded appearances.

According to Kant, the well-founded appearances come from the activity of the mind exercising itself on unknown things.

Fichte, Schelling, and Hegel, the followers of Kant, were not satisfied with the complete separation he had made between appearances and things. In fact, Hegel conceived a continuous ascent from appearances to things: nothing is lost, and all that appears in the world of appearance is kept under deeper forms in the world of reality. And it is this idea of Hegel which is taken up again by Bradley when he represents the Absolute as constituted by appearances, but appearances that are themselves united and transmuted in the Absolute.

Thus, according to Hegel and Bradley, every appearance is only an inferior degree of reality. But with Nietzsche we have still another solution of the problem, or rather a negation of the problem;

for he denies altogether the separation between appearances and reality, saying, though much more definitely than Bradley, that reality is in the appearances, or even, in opposition to Bradley, that there is no reality, that there are only appearances, and that by a kind of intellectual perversity men have constructed these imaginary worlds behind the real world. We are in the presence of phenomena, and there is nothing to seek or to find behind them. We have only to take them as they are. In themselves they are revelations, but only revelations of themselves. This is what might be called the Nietzschean phenomenology.

If we now consider these three ideas—Being, Existence, and Reality—we may observe first that Being and Existence are sometimes understood as one and the same idea; what Kant said about Existence could as well be applied to Being. Moreover, if we compare these three ideas, we may summarize what we have said about Being with the affirmation that the idea of Being is too abstract and must be replaced by a feeling or a sense of Being, that the idea of Existence has appeared more and more as emphasizing the particularity and even partiality of certain aspects of human Being, and that the idea of Reality has gradually come to be considered as an all-comprehending whole. So if we wish to simplify a little the relations among these three ideas, we might say that Existence is subjective partiality, Reality objective—or even more than objective—totality, and the feeling of Being is a kind of bond between them. If we keep in mind Bradley's thesis that Reality divides itself into the *that* and the *what*, we might say that this division in Reality has for one of its consequences the feeling of the *that* which is our Existence.

The effort to give significance to the term 'Being' seems bound to fail. Sartre divides Being into two kinds—Being in itself and Being for itself. But this distinction is not quite satisfying, since what Sartre describes as Being in itself is purely an abstraction, he means by this expression the separate things in their separateness, for example, a table, a wall, the root of a tree. But there are really no things in themselves in the sense in which Sartre uses this expression; the root is related to the past tree, the future tree, and the present tree, and the wall is related to the room, and so on. As for the Being for itself, by which Sartre means consciousness,

he defines it by its relation to Nothingness, which would lead us to think that one of the kinds of Being is a kind of Not-Being. This is quite possible, but it raises many problems. Moreover, Sartre has to relate these two kinds of Being. According to him, Being for itself is the product of a kind of subtraction or even annihilation performed within Being in itself, and we are introduced here to a nearly cabalistic conception.

Heidegger's division of Being into Existence, the Being of things seen, and the Being of instruments is not much more satisfactory, for of the three kinds of Being he considers, two, the Being of things seen (as a spectacle) and the Being of things used (as tools), are defined by their relation to the third kind of Being, which is Existence. Thus, only one real kind of Being is left. This too is possible, but we had been promised three kinds of Being.

If these theories of Being fail to satisfy us, there are in modern philosophy two theories, that of Kierkegaard and that of Bradley, which permit us to give of Existence and Reality, as distinguished from Being (which is not for us a positive idea), a definition, or rather, a description clearer than many that have been offered before.

PLATO represents Homer and Hesiod as the first philosophers. He says that they were partisans of a theory of universal movement, since Homer, for example, believed that the Ocean was the father of all things. Thus, according to Plato, the earliest philosophy was Heraclitean. We may add that Heraclitus, probably the first philosopher who had a definite theory of universal movement, came before Parmenides, the philosopher of universal rest.

Parmenides and his disciple, Zeno, opposed the doctrine of universal movement, declaring it to be contrary to intelligence and to the principle of contradiction. This hostility to movement, notable in many Greek philosophers, has been said to be one of the fundamental characteristics of philosophical thought. In fact, we may find it also in Anaxagoras, who, in constructing things out of pre-existing elements, said that everything we see today is only a composite of things that have eternally existed. And the thought of Democritus may likewise be said to derive from Parmenides, because Democritus only cuts the Parmenidean One into small bits (the atoms). We might follow this struggle against change and movement in modern philosophy too. Descartes tried in his physics to take account only of the immediately preceding moment in order to explain phenomena. There is a tendency in Descartes to insist on instantaneity in his theory of light and of the world in general as well as in the *cogito*. This is a way of evading the concept of change, the passing from instant to instant. Spinoza said that the philosopher has to see things under the aspect of eternity. Bradley and Spīr may be considered as very near the thought of Parmenides; and Meyerson may be regarded as a representative of the Parmenidean tendency in the modern criticism of science. According to

him, science is essentially the discovery of identities, and the concept of cause satisfies us because it is a way by which we may represent successive phenomena as fundamentally identical.

We find in Plato's *Theatetus* and in Hegel's *Phenomenology of Mind* a criticism of the reality of Becoming, at least of sensible Becoming, based ultimately upon language. What can these things be, asks Plato, of which we cannot even say that they are this or that because they are changing at every moment? This is how he criticizes the Heracleitean theory, which, according to him, is the ultimate foundation of the skeptical philosophy of Protagoras. As for Hegel, we have already seen how he criticizes the ideas of the here and the now. At every moment I may say, 'Now', at every place I may say, 'Here.' So the now and the here, instead of being very concrete ideas, as many people imagine, are very abstract and empty ideas, being filled with the most different realities according to the different moments and places to which they refer. We have already noted, too, how these observations of Plato and Hegel might be answered. They have supposed that language is or ought to be a revelation of things, and thus, according to them, language has failed because it stops short of this complete revelation. But they have not paid sufficient attention to the fact that man, when he speaks, particularly when he utters words like 'here' and 'now,' means only to designate, to direct the mind toward something.

The first question we have to ask ourselves is whether Becoming can be an object of our thought and on what conditions it can be such an object. Let us take this last question first. It has been said that we can think Becoming only if we conceive a permanence to which it is opposed and from the background of which it might detach itself. This is a point Kant has emphasized in founding the category of substance on its being necessarily presupposed when we conceive Becoming. However, it does not seem that in order to think Becoming we have to conceive an absolute permanence, and Kant would probably agree that a relative permanence is sufficient. He might then say that this relative permanence is taken as representative of the category of substance itself. But this qualification does not appear to be completely justified, and it seems sufficient to say that there are under the swiftly changing things some things that do not change so swiftly and by comparison with which we may see the swifter passage of the others. Such was the theory of

Protagoras on this point, and everywhere he substituted for rest and substance movements of different directions and speeds (and so did Hume).

We may conclude, then, that the idea of permanence is not necessary for the conception of Becoming. We may say also that Becoming is not well defined when it is defined as the passage from one stage to another stage, because in reality these stages themselves are parts of Becoming, indeed are Becoming, and here again what is needed is only the conception of slower and swifter movements, the slower being designated by the term 'stages.'

The question remains, even when we have said that these conditions (permanence, stages) are not necessary for the conception of Becoming, whether Becoming can be really thought. The answer to this question depends on the meaning one gives to the term 'thinking.' If by 'thinking' one means a very precise and scientific understanding, one cannot say that Becoming is an object of thought, because it is not by intellectual juxtapositions of instants that we can know what Becoming is, but only by something analogous to what Bergson has called intuition.

Many philosophers (and Aristotle in particular) have related the idea of Becoming to the ideas of imperfection, Not-Being, and the possible.

However, Becoming is no more related to the ideas of imperfection, Not-Being, or possibility than it is linked with the ideas of permanence and stages. But there is an idea with which Becoming may be regarded as connected: the idea of quality. If there were no heterogeneous qualities in the world, there would be no Becoming.

Philosophers have conceived different modes of Becoming. For example, Heraclitus always conceives of Becoming as taking place between contraries: the cold becomes the warm, the soft becomes the hard, et cetera. The tension of the opposites explains Becoming. Plato, particularly in the last stage of his philosophy, conceives the source of Becoming as being what he calls, using a Pythagorean term, 'the indeterminate dyad,' i.e. that which goes in one direction or the other, like temperature, without there being any limit inherent in the extent of the change itself. Aristotle presents an analysis of Becoming founded on the oppositions between Privation and Form and between Potency and Act; so that his analysis ends

sometimes in the affirmation that there are two opposite terms, Potency and Act, and sometimes in the affirmation that there are three different terms, Privation, Potency, and Act. (Aristotle presents another analysis of Becoming in distinguishing among the four causes.)

The concept of change or Becoming was reserved by the ancient philosophers, with some exceptions as we shall see, to the sensible world. Under different influences, the modern mind has come to be aware of the presence of change in the spiritual as well as in the sensible world. The philosopher whose doctrine may be said to represent the integration of movement into his whole spiritual scheme is Leibnitz. According to Leibnitz, it is a property of the monads to pass from perceptions to perceptions in a never-ending movement. Mathematical considerations, such as those of the differential calculus, and the physical concept of force contributed to the formulation of these ideas of Leibnitz. In the nineteenth century, historical considerations were added to the preceding ones and superseded them. The thinker whose philosophy embodies and indeed determines the thought of the nineteenth century on Becoming is Hegel. There is a kind of analysis of Becoming in Hegel, or rather a kind of synthesis of Becoming, since, according to him, Becoming is the synthesis of Being, which is the thesis, and of Not-Being, which is the antithesis. We have already said that the idea of Not-Being does not seem to be necessary for the constitution of the idea of Becoming; and although it is very interesting to observe how this idea intervenes in Plato and Hegel in the definition of Becoming, we may doubt the validity of their analyses, which remain too conceptual.

To all these interpretations of Becoming, some too conceptual, like those of Aristotle, Plato, and Hegel, and others too regulated and determined, like that of Leibnitz, we may oppose the conception of Bergson. According to him, Becoming cannot be explained as a degradation of Being, or as a mixture of Being and Not-Being, or as a play between contraries, or as a passage from Potency to Act or from perception to perception (although this last idea would be nearest his thought), but is by itself and in itself, is grasped as an absolute, is the very substance of the universe, if we are willing to accept this paradoxical use of the word 'substance' to designate change and what Bergson calls *durée*.

So the only conditions for our thinking Becoming are the different degrees of slowness and swiftness within Becoming, and no analyses of Becoming are possible, since it is something immediately given and felt.

Nevertheless, we may ask what kinds of changes first gave man the idea of change. We should have to mention the sea, which was early taken as the symbol of universal change, and cyclical changes, not only those of flux and reflux, but those of night and day, waking and sleeping, inhaling and exhaling, which gave Heraclitus the idea that movement is antithetical. There are also the changes that are developments, like the ripening of fruit, and in a certain manner these changes are related to the cyclical changes, since the ripening of fruit is related to the seasons. Then there are the changes that are the reverse of the preceding—aging and dissolution. All these rhythms of change are related in some manner to one another. There is a whole structure of rhythms that constitutes our universe.

When Bergson wants to make us realize the nature of change, he sometimes speaks of melodies in which one note cannot be really separated from the others, or of maturation, or of the growth of snowballs. This last comparison seems to be the least satisfying, because the growth of a snowball involves a purely quantitative addition, and so quality is translated into quantity.

The categories of Becoming, such as Beginning and Disappearing, might also be studied. Hegel has given some examples of analyses of such categories and in particular has shown the difficulty inherent in the concept of Beginning.

Let us examine what we might call the antinomies of Becoming. We speak of Becoming in general, but there are all kinds of Becoming. Becoming can be defined only by alterations, changes of quality, but in order to think Becoming in general, we have to abstract from particular qualities. So we have at the same time to presuppose the thought of qualities and to eliminate these particular qualities. Moreover, although we always perceive Becoming in particular forms, we have the feeling that these forms can be understood only by the existence of a universal Becoming. Thus we are sent back from the particular Becoming to the general Becoming and from the general to the particular.

Then there is the question of the subjectivity or the objectivity of Becoming. We might say that Heraclitus, for example, gives more

emphasis to the objective aspect of Becoming and Bergson to the subjective. But we find the affirmation of an objective Becoming in Bergson, and the affirmation of a subjective Becoming is implied in Heraclitus. Hegel unites both aspects. Indeed, there is always a subjective element in our thought of Becoming if it is real, for, as Bergson points out, our perception of change always presupposes an identification of ourselves with the thing that changes. Although at first man observed change primarily in things, he has come to feel it primarily in himself. The perception of change always implies a kind of inward intuition of change.

We next have to consider whether change is to be conceived as continuous or discontinuous. The Pythagoreans and the Eleatics argued this question, and it was much discussed in the Middle Ages, figuring in both Arab and Christian philosophies. According to Descartes, creation is continuous (or, more properly, discontinuous because renewed at each instant, which he regarded as separate from the preceding and the following one). On one side of this question we find Renouvier, James, Rauh, and Bachelard—all philosophers of discontinuity—and on the other we find philosophers of continuity, like Bergson.

One might say on first consideration that the ideas of continuity and discontinuity also assumed more importance and greater clarity than ever in the nineteenth and twentieth centuries. The nineteenth century witnessed the development of the theories of evolution, which, uniting in one great vision the astronomical hypotheses of Laplace (and Kant) and the biological theories of Lamarck and later of Darwin, saw the world as passing from a primitive nebula to the most differentiated species of the animal kingdom. But in fact Leibnitz in the eighteenth century had presented a whole theory founded on continuity.

After the insistence on continuity, which characterized most of the nineteenth century, there came an emphasis on discontinuity. The concept of the threshold in psycho-physics may be regarded as already pointing in this direction. The theory of mutations opposed its affirmation of discontinuity to the continuity implied in the Darwinian theory, although one must note first that Darwin presupposes some unexplainable variations, which are very close to what are called mutations, and secondly, that the discontinuity affirmed by De Vries was not conceived as contrary to the Darwinian

conception. It is in physics that the tendency toward discontinuity is more marked, if we wish to call a tendency what is in fact the desire to be true to that aspect of the facts which is revealed to us.

The idea of continuity is the idea of adhering to, but when one tries to express this in a more intellectual way, one is naturally constrained to resort to more abstract terms: there is a continuity when between two points, no matter how near, one can always posit a third. Such is the abstract mathematical idea of continuity. But, of course, as Bergson and James have shown, this can be only an imperfect approximation of real continuity.

We have mentioned the Eleatics. One could oppose the Eleatic continuity to the Heraclitean continuity, and the Pythagorean discontinuity to the Atomistic discontinuity.

The Eleatic continuity is more (or less) than continuity: it is the density of a sphere, the sphere of the universe, everywhere filled, always perfect and without any movement. It is an immobile mass from eternity. The Heraclitean continuity is the continuity of a river or a flame. It dies and begins again.

There is something in common between the Pythagorean discontinuity and the Atomistic discontinuity, even if one admits that the Atomists derive rather from the Eleatics than from the Pythagoreans.

It was to defend the Eleatic continuity against the Pythagorean discontinuity that Zeno formulated his paradoxes. According to Plato (in the *Parmenides*), Zeno wanted only to show the weakness of the Pythagorean view, according to which the real is made of points and instants. We cannot here survey all the solutions that have been offered of the paradoxes of Zeno. We may mention the one that would consist in asserting simply that space and time are illusions, as Parmenides said, and forms of the mind, as Kant said. If one does not wish to deny the reality of space and time, one has to say with Aristotle that divisibility into points is rather a potentiality than an actuality, that what is real is the whole of the movement, and that the elements are abstracted from it; or to propose with Russell a mathematical theory of the infinite according to which the infinite is a self-reproducing system; or finally to accept the thesis of Bergson according to which movement and duration are indivisible. It is not certain that the mathematical theory of Russell really solves the problems involved; perhaps it offers us

only a mathematical solution of a question that is not only mathematical. As for the solutions of Aristotle and Bergson, they seem very near each other, except for the fact that Aristotle translates the idea into the abstract notion of Potency, whereas Bergson sends us back to our original intuition and insists on the irrationality of change—which is a difference of considerable importance.

We might also mention theories like James's, which maintained that there are drops of time, and the recent theories of physics according to which energy pulsates in discontinuous quanta. So we have the feeling that either a Bergsonian theory of continuity¹ or a theory of discontinuity analogous to that of James's (in some passages of his writings) could solve the problem equally well. More generally, we could say that both the ideas of continuity and discontinuity are true successively, first one, then the other, both being used by the mind to take a view of an inexhaustible reality. But the very fact that reality is inexhaustible whether conceived in terms of continuity or discontinuity shows us that we might equally well say that neither of these modes of describing it is true. Both are concepts and tools of the mind. Although continuity seems nearer the concrete, it is nevertheless presented always in more or less intellectual terms.

We may note too that Plato and Aristotle tried to combine these different elements; for example, in Plato the instant as it is presented in the *Parmenides* and the indefinite dyad as he expounded it in the lessons that Aristotle heard are two manners of preserving these different aspects of reality, the one the discontinuity, the other the continuity. And we shall see that quantity, according to Hegel, also presents itself in these two forms.

If we now consider the three antinomies that we have found in the idea of Becoming, we shall observe that in the case of the first, both terms, the general Becoming and the particular Becoming, are true at the same time and presuppose each other; that in the case of the antinomy between continuity and discontinuity, both may be said to be true successively or both may be said to be ultimately

¹ It may be noted that a certain aspect of Bergson's theory would lead him to an affirmation of discontinuity; for even if the flight of the arrow is one continuous, indivisible movement, it is separated from the events that come before or after it. Thus, Bergson's theory would not be so far from the theory of the blocks of duration by which James seems to try to unite Bergson and Renouvier.

false; and that in the case of the third antinomy, that between the subjectivity and the objectivity of change, both are true.

Change is something more complicated than perhaps would appear at first sight. Alexander has pointed out that one moment of our time includes in itself different dates. For example, at the present moment the light from a very distant star, which left it many centuries ago, comes to me; and this light does not have the same date as the white wall I see a few feet from me. We might say in the same manner that the cells in an organism are not really contemporaneous or are both contemporaneous and differently dated.

Change and time are said to be irreversible, to pass from the anterior to the posterior; but sometimes we have the feeling, for example, when we awaken from dreams, that time flies backwards, as if it receded very swiftly and very far from us.

Hegel and Kierkegaard, so much opposed on many points, have emphasized the idea that in change, in time, the future is pre-eminent. According to some passages of these philosophers, we might say that we construct time in starting from our future. But Hegel knows very well that the future is in a certain manner determined by the past, and Heidegger insists on those limitations on the future which have their origin in anterior circumstances. In the same manner, Bergson insists on the *élan* toward the future, but the idea of *élan* itself contains a reference to the past, the springboard from which the *élan* takes its start.

Kant says that in order to think of change we must perform a synthesis. However, it should be noted that this synthesis is rather a resynthesizing of something given at first. Moreover, according to Kant, every synthesis seems to be an act of the mind. So there is on the one hand the unorganized multiplicity of things and on the other the organizing synthesis of the mind. Plato, who started from a somewhat similar position, finally concluded that there is no complete opposition between Becoming and Being, but that there are, within Becoming itself, more stable terms, which he called, paradoxically, the substances that have become, and a tendency toward these substances, which he called, again paradoxically, a Becoming toward the substances. This is very similar to Aristotle's idea of the *entelechy*, a perfected act. In these intuitions of Aristotle and Plato

we may find a reconciliation of Becoming and Being, the first flowering into the second, the second bursting forth from the first.

Is there a direction of Becoming? Is there an evolution, which passes from the undifferentiated and unintegrated to the more and more differentiated and integrated, as Spencer conceived it? Or are there ever-recurrent cycles? Probably there can be no general answer on this point. There may be cycles within evolution, and there may be evolution within cycles. Here again we should find superimposed structures of Becoming. And, of course, we cannot now see whether everything moves in cycles or whether there is a unilinear direction in the movement of things. Nevertheless, we can say that the idea of cycles would be the negation of the idea of real duration as an ever-changing process. The idea of unilinear progress is no more satisfactory. Nor is the idea of a center of history, as it has been conceived by Christianity, completely self-sufficient, since even in Christianity we have to complete it by other ideas, like that of the Last Judgment. So, being in time without knowing its orientation, we have only to give to time the fullest meaning we can give it by our acts and will, and sometimes by our adherence to something that appears to us as beyond time.

With regard to the comparative value of temporal and eternal things, we might oppose, as Léon Brunschvicg did, a line of Vigny and a line of Leconte de Lisle, the former telling us to love what we shall never see again, and the latter asking, 'What does all this matter since it is not eternal?' Here is a complete opposition between temporal and eternal values. In Shelley and Novalis, we might find attempts to unite these two kinds of value. The metaphors of flames and rivers in Shelley, always enduring and always changing, the passages in which Novalis represents a fusion of the past and the present, of a past already lived and of a present never lived before, are indications of these attempts.

The idea of the union of the different moments of Becoming has been symbolized by Novalis through the 'marriage of the seasons.' And Kierkegaard has applied to man the same idea of a union of the periods of Becoming, expressing the wish, already voiced by some romantics, to unite childhood, maturity, and old age in a synthesis that would make each one of them contemporaneous with the others.

Here too there is probably no purely theoretical solution but only a practical one. If we were to think theoretically about the two words 'I become,' we should soon lose the meaning of each. Who is this I? And if I am I, how can I become? But there is a practical solution, which consists in the construction of ourselves and at the same time the destruction of ourselves, because the one does not take place without the other. We have to become our Being and to be our Becoming, uniting these two elements by our works, by our oath and promise, which, as the philosophers Alain and Sartre have insisted, reveal our will to constitute our stability within our Becoming. By our oath, as Sartre says, we link our future with our present and our past.

Kierkegaard and Nietzsche have emphasized this need of man for something he maintains notwithstanding the ever-changing flux. It is what Kierkegaard means by his idea of repetition, which is like isolating and eternalizing in a certain manner some moments of our Becoming. But it is also something like what Nietzsche means when he says that we must say Yes to life and seal our nature with our acts. We have to construct ourselves even in the midst of our aging and destruction, even through destruction.

Recent philosophers have stressed what they call 'Being toward death,' but it is the peculiar feature of the human situation *not* to think about this 'toward death.' Life goes always toward life, and death can be conceived by life only as a partial destruction, or sometimes for the finite individual, a complete destruction, necessary for a construction conceived as posterior. This again might be symbolized by Nietzsche's idea of the self-transcending character of life and the affirmation and reaffirmation that man has to make, constituting at the same time himself and the world of which he is a part, even if, as Nietzsche believed, the world has no meaning, we may by our very acts give it a meaning, and this is a joy for the one who is strong enough to bear the vision of this irrational world.

But we have said that Becoming may have a meaning by itself and that it constitutes these 'substances that have become,' of which Plato spoke. Not only works of art but living beings and things are such substances. In fact, Kant's view approached that of Plato when in his third critique he conceived the wholes that are works of art

and living organisms. So the world is probably not so irrational as Nietzsche's Superman conceived it. Even if it were irrational, the individual could give it a meaning and a reason. But, since the world is not completely irrational, the individual may at the same time take from it a reason and give it a reason.

[1]

SOME philosophers have distinguished what they call subsistence from what they call existence. Thought creates the idea of truth, that is, the idea of an atemporal existence, of an existence in a time that is, so to speak, no longer time—a kind of dead time.

Plato said that the Ideas exist more fully than the sensible things. Although James and Russell present theories not very far from those of Plato, the essences they conceive exist in a lesser degree than the sensible things, having, as it were, a shadow of existence or a kind of existence in shadow, like what Meinong calls the 'objectives.' This is what they mean by 'subsistence.'

To this idea of subsistence may be related the more current idea of essence as it is presented by Plato. What Plato affirms is that behind the appearances there are the essences or the Ideas. It would be interesting to see whether this idea of essence is not itself a representation of the idea of subsistence, that is, the hypostasis of propositions about things. A triangle or a horse or a man has certain specific properties that constitute its essence, and it is in the form of propositions that these 'essential' properties may be attributed to things.

Hegel has formulated in a masterful manner what we may call the dialectics of essence. According to him, essence is the negation of Being and at the same time the truth of Being, a continual ascent and descent takes place between Being and essence. He points out, too, that essence refers to the past. This is well illustrated by Aristotle's designation of essence as 'what is what it was.' Hegel demonstrates also that essence is the negation of the immediate; indeed, he first calls it mediation and shows us how many problems

are raised by the relation between essence and its properties. Finally, he defines essence as the realm of contradiction, as both false mediation and false immediacy. Thus, his dialectics leads him in the end to the negation of the essence he has posited, and he quotes Goethe's saying that 'there is no shell and there is no kernel.'

In Hegel we see for the first time a criticism of the separation between essence and non-essential qualities. According to him, essence would not be essence if the non-essential qualities to which it is linked did not exist, so that the non-essential is essential to essence.

When Bradley says that the distinction between the *that* and the *what* is made only by thought and does not correspond to any distinction in things, he also presents an idea that may be useful for the criticism of essence, since the essence of a thing is its *what*.

The philosophers of the nineteenth and the twentieth centuries have shown a general tendency to replace the idea of essence either by the idea of law or by the idea of value.

But some of them—for example, Nietzsche, Bergson, Dewey, and Heidegger—have gone even farther and, in agreement with the ideas of Hegel on this point, have denied essence altogether. Nietzsche and Bergson denied essence because everywhere they saw Becoming and nowhere stable Being.

From very different standpoints Hegel and Nietzsche come to the same conclusion, that is, they deny the difference between appearance and reality. For Hegel, reality manifests itself in its appearances and does not exist outside them. According to Nietzsche, we do not have to seek beneath the appearances for anything deeper. Phenomena are Absolutes, the shining manifestations of themselves.

Bergson believed that the idea of essence comes from the habit of the human mind, and particularly of the Greek mind, of looking upon things as if they were instruments or objects made by man. Heidegger has developed a similar theory. And this consideration leads him to question the legitimacy of the idea of essence, particularly in its application to human beings; for, according to him, one cannot separate from the existence of a man something abstract that would be his essence.

It is in this sense that we must understand the negation of essence by such philosophers as Bergson, James, Dewey, and Heidegger, and, we might say, even of Hegel before them. It is a rather curious

fact that the phenomenology of Husserl, which tries to distinguish the essences from the existences, has as its sequel—a dialectical sequel—the theory of Heidegger, who ends by denying essence entirely.

In fact, the idea of essence raises more problems than it solves. What are the relations among the essences? How can we explain the descent of essence into existence? How can we explain individuation?

If we ask ourselves what the reality of a thing consists in, what its essence is, we shall be led to many confusing questions. Perhaps we might say with some of the neo-realists that a thing is the sum of all its aspects, or with the phenomenologists that it is given and not given at the same time in all its aspects.

The pragmatists have shown that essence is related to use or consequence. The essence of a table or of a door is the use of the table or of the door. And Heidegger has formulated this same idea in a more abstract form in defining essence as projected. The pragmatists and Heidegger have added that essence bears a relation not only to the future but also to the past. The conception of essence involves a kind of retrospection. Similarly we might say—and on this point too we should be in agreement with Hegel—that in essence there is at the same time possibility and necessity.

But this union of projection and retrospection, of possibility and necessity, could not have been possible without the influence of language. In particular, the separation between the *that* and the *what* can take place only because there is a verb. Essence is a grammatical conception. The subject is the substance, the verb is the existence, and the essence is the essential attribute.

As early as in the *Parmenides* we may find the formulation of what might be called the second theory of Ideas in Plato. The first is the affirmation of the Ideas as intellectual beings quite separate from the sensible beings and to which the souls in particular are related. The second is the affirmation of the Ideas as wholes ordering the sensible things and in a certain manner comprehending them within themselves.

We have already seen how Plato in the end seems to deny the complete separation he has traced between non-essential things and essences, for in some of his later dialogues he speaks of some-

thing like a coming into form and a substance that is the product of this Becoming.

The idea of form is very near the ideas of soul and of force. In Aristotle, in Spinoza, in Alexander the soul is the form of the body. In Leibnitz the soul is conceived as force as well as form.

Classical philosophy, as we have seen, is characterized by the distinction between essence or form, and existence. Kant remains faithful to the classical tradition in so far as he maintains this distinction, which, in fact, is a necessary presupposition of his philosophy. The difference between him and his predecessors is that, while maintaining the distinction, he does not think, as they did, that existence can in some instances be deduced from essence. But, as we have said, according to Kant, the distinction between them is essential for the theoretical as well as for the practical reason. For the theoretical reason there are forms of intuition, that is, space and time, which are themselves intuitions, and the categories of the understanding are also forms. And for the practical reason, the value of the moral rules consists in their universal form. According to Kant, what is moral in an act is not its content, but only its form.

Scheler has criticized the Kantian ethics on the ground that it is purely formalistic and pays no attention to the content of the act. Many thinkers today would question whether an act is necessarily good merely because it is motivated by obedience to a universal rule of conduct.

One of the most interesting ideas of Heidegger is that when we speak about individuals we cannot separate the *that* from the *what*, the existence from the essence.

On the other hand, Whitehead has shown that in a certain sense form comes from matter, is indeed an emergence and concrescence of matter. Matter flowers into all kinds of forms—the statues, the hands that make the statues, the eyes that see them. The separation of form and matter is an abstraction. The truth is their concretion.

From this point of view, form would not in general be superimposed on matter, although this is what man does in making things. Form comes from matter. Matter is compressed into form, but not by form. It is compressed into form by matter itself passing into form. The statue is the product of the eye and the hand; but the eye and the hand are material products of the ethereal matter

which is light and of the tactual matter which flowers into organic forms.

Here again we see the philosophical doctrines annihilating themselves. Here again we find ourselves on the eve of a revolution as important as the one that occurred when Descartes substituted the modern for the ancient view of matter.

And it is not only Heidegger's philosophy of existence and Whitehead's philosophy of organism that deny the reality of the separation of matter and form. Koffka and Kohler, the *Gestalt* psychologists, also deny this classic distinction, because for them matter in itself has a form.

Similar observations may be made with regard to the criticism of poetry and art. There are formalists who insist on the primacy of form, but is it right to consider form in abstraction from content? In a great work of art form and matter are given at the same time.

We may go even farther. We have insisted on the inseparability of matter and form. But if we wish to separate them nevertheless, we shall have to say that essence is not the effable thing conceived by classical philosophers. Following the intimations of such poets and prose writers as Shelley, Holderlin, Mallarmé, Rilke, Proust, and Virginia Woolf, we might imagine an ineffable essence—an essence of moments, an affective essence grasped by sympathy and intuition. But here again certain problems present themselves. What, for example, is the relation between particular essences, let us say the essence of a symphony of Mozart, to the essence of the symphony in general? (Or—which is possible—do we have to deny the latter?)

On the other hand, we have to remember that, as we have said at the beginning of this chapter, there are purely intellectual essences—what Bolzano and some of the predecessors of the phenomenologists called propositions-in-themselves.

So we have seen first that for him who philosophizes in the present state of philosophy there is no separation between matter and form; then we have seen that there is in man nevertheless a tendency on the one hand toward affective forms given in intuition, and on the other hand toward intellectual forms given in propositions. But even after we have noticed these two tendencies, we have to reabsorb the forms into the content, into the matter, and we find ourselves in the presence of the constant interplay between form and no-form. This interplay constitutes the life of spirit.

Human nature always distinguishes between essence and existence, between the *what* and the *that*, but it always has to reunite them. The two movements always follow each other in succession

[2]

Matter (*materia*) primitively is something like 'that from which things are made,' like the wood for the table or for the ship. We are not very sure about the meaning of the Greek word ὕλη. But what is certain is that matter is opposed to form, ὕλη to εἶδος.

The Greeks, as we have noted, conceived everything on the model of the work of art or the artificial object. So the matter of the statue was the marble. But the marble itself was not the primordial matter, it was a matter with a form, an informed matter.

The primordial and real matter, eluding all forms, was really indeterminate, since every determination was constituted by the form. Plato said that we can see what he called space or matter only by a kind of bastard or oblique reasoning.

This indeterminate background of things, which Plato called the universal receptacle, was, according to Aristotle, always in movement; but with two kinds of movement, one of desire toward the form, and the other of rebellion against the form. So there is in Aristotle a fusion of two conflicting notions of matter, matter tending toward the form and matter revolting against the form; the one tending toward the creation of organic bodies and works of art, the other toward the creation of monsters and manifestations of chance.

We have already noted the anthropomorphic nature of this conception. We may now see that as long as it lasted it could solve many problems, but it raised as many problems as it solved, and it was not at all clear. At best, the theory of matter, as presented by the great masters, Aristotle, Aquinas, and even Leibnitz, was only a manner of translating into philosophical terms a half-rude common sense, not rude enough to be really that kinship with the world of which certain modern philosophers speak, and not refined enough to be of any use. The scholastic philosopher could not answer such questions as. How does it happen that in some intelligent beings there is individuation while there is no matter? And they could not easily reconcile the view of Aristotle on the eternity of matter with the Christian theory of creation.

Galileo and Descartes may stand as the chief representatives of

the modern conceptions of matter. It was natural that the Greeks, who had no science of nature, should have considered matter as indeterminate. And it was equally natural that, influenced by the achievements of science, the modern philosopher should have considered matter as reducible to pure intellectual concepts, indeed to one pure intellectual concept, that of extension. We know that in general Descartes acknowledged as true only what was clear and distinct. What is clear and distinct in the idea of matter? Extension only. From this extension he banished what was later to be called the secondary qualities, like color and odor and sound, and he kept only pure quantitative space, points beside points.

But the Cartesian conception of matter proved no more adequate than the Aristotelian. Although matter was no longer conceived anthropomorphically, it was at least conceived by man, it was at least anthropomorphic in the sense that it was formed by the mind. It might even be said that the matter of Descartes was more man-made than the matter of Aristotle. Moreover, the Cartesian conception also raised as many problems as it solved. In particular, as we already know, the problem of the union of mind and body assumed great importance for Descartes and his successors.

So Leibnitz thought that it was better finally to return to the Aristotelian conception. The physicist Boscovitch, 'applying the Leibnitzian theory to physics, conceived a dynamic matter made of centers of force.

Going farther than Aristotle and Descartes on the way toward anthropomorphism, but now more conscious of it, and so at the same time opening the way toward liberation from it, Kant saw in matter as well as in substance one of the categories of the mind and thus completed the process of the classical evolution of the idea of matter.

But in Descartes and Kant we have seen only one of the two tendencies that have dominated modern philosophy. We must now consider the materialists and their attempt to solve problems that were not less difficult than those of the idealists.

What is materialism? It considers itself very easily definable. It is not—but what is easily definable? Everything is body, says Hobbes. Every substance is body. If you say you are a substance, you say you are a body. This is one of his chief objections to Descartes. But what is body? In Hobbes, body contains endeavor, and even this

idea was not without influence on the formation of the idealistic system of Leibnitz.

We see here one of the difficulties of materialism. Matter must not be defined only in the Cartesian manner, it must contain force and energy. This was the idea of some of the materialists of the eighteenth and nineteenth centuries.

But the result was that they were able to define matter only negatively, as not-mind. And they were able to arrive only at the formula: mind is not-mind and is produced by not-mind.

Just as Aristotle could not say very clearly what substance was, as Descartes could not easily explain how the body could influence the soul and *vice versa*, so the materialists could not say anything clear about their problem, as we shall see later.

We may note here that some philosophers—particularly Berkeley and Lenin—couple the question of materialism and spiritualism with the question of idealism and realism. Berkeley denies materialism because matter is a general idea, and for him there are no general ideas, hence, matter does not exist, there are only ideas, and ideas are only in the mind. This is precisely what is denied by the materialistic realism of Lenin, who does not think that it is legitimate to abstract mind from its conditions. So what is concrete for Berkeley is abstract for Lenin, and what is concrete for Lenin is abstract for Berkeley.

Now that we have seen the development of idealism on the one hand and of materialism on the other, we may consider the possible influence of recent scientific discoveries on the evolution of the idea of matter. Here, as for every other problem, we have to take account at the same time of the increasingly liberating influence of science, of the sense of our kinship with the world (Heidegger), and of the idea of causal efficacy (Whitehead) in the background of our common sense (which is in fact a very uncommon thing). More refined and subtle, and yet more crude and less artificial—such has to be our conception of things.

What is matter? It is energy. What is energy? It consists, it seems, for the moment (for science, let us not forget, is not eternal, but science of the moment) in discontinuous quanta of energy. These discontinuous quanta of energy are not so easily located as Cartesian and Newtonian science thought. They are here and there; they are

at the same time (if there was a same time) at different places, just as the energy of vision is in my eye that sees, in the object seen, and in the intermediary region, flitting to and fro, always escaping, always alighting, truly a lightning and an alighting. This play of energy is perhaps more dialectical than so-called dialectical materialism (which contains precious hints at the truth, but many too dogmatic formulations).

So we have to come to an immediate feeling of matter, and science may help us to attain to a clearer consciousness of this feeling.

The pragmatists already had some consciousness of it, and we may keep their idea (or what we might imagine could logically have been their idea) that matter is what matters.

But behind this pragmatic conception there is another, that of the deep flow of matter in which we are merged, a flow composed of millions of active drops, of active centers of life about which we can say nothing, if it is true that they constitute everything. They are not even here and there. They are not; they become. They act.

Science and the new philosophical conceptions are united in their common rejection of Cartesianism.

Matter, being no longer opposed to mind or to form, can no longer be defined. A mystical materialism becomes possible, indeed becomes real.

THERE are philosophies of quantity and there are philosophies of quality. Atomism is a quantitative theory. Corresponding to it is monadism, which, quantitative in a certain sense, is more a theory of quality.

To exemplify this difference between quantitative and qualitative philosophies, we could have cited monistic as well as pluralistic theories; and then we might have chosen Heraclitus and Bergson as examples of qualitative monism, and the mechanistic materialists as examples of quantitative monism.

The ideas of quantity and quality are of such generality that it may be asked whether they correspond to clear and distinct realities. The first, the idea of quantity, includes in itself the ideas of space and of time, which are called continuous quantities, and the idea of number, which is called discontinuous quantity. But we may question whether there is really anything common among these different ideas. With regard to the idea of quality, we are reminded of Hamelin's statement that it is a notion of a very strange complexity, having very numerous kinds, each of which is diversified in an infinite multiplicity of nuances. Precisely because it exhibits this diversity, this irreducibility, Alexander denies that quality is a category. And, in fact, each quality does form a separate realm, and the very idea of quality implies this irreducibility. Moreover, the conceptions of quality and quantity appear to have undergone a radical transformation in the course of time. For the ancient philosophers, particularly for Plato and Aristotle, quantity, since it could become either greater and greater or smaller and smaller, was considered as indeterminate; quality, on the other hand, was the form, the Idea, the limit, the determination. For modern science,

on the contrary—beginning with Descartes—what was for Plato indeterminate space ceases to be the principle of indetermination and becomes mathematical space.¹

Another point worthy of notice is that in considering whether we have to begin with the study of quality or with the study of quantity, we have to distinguish what we may call, after Aristotle, the order of being from the order of knowing. It is possible that quality is first in the order of knowing, but not first in the order of being, or *vice versa*.

Perhaps it will be convenient to divide each one of these two notions, or at least the notion of quality. For it is possible that there is a quality whose knowledge comes after the knowledge of quantity and a quality whose knowledge comes before.²

It is even possible that any order is in this case artificial, that each one of these two notions or realities (we do not know yet which they are) exists only by its opposition to the other, and that they come into being simultaneously. This is not impossible if we imagine a common term from which both are derived. But in such a case it is probable that this common term would be nearer to quality than to quantity.

[1]

We may say that there is an antinomy of quality. We have recalled the statement of Hamelin that it is a notion of a strange complexity. But he tells us also that it is the simplest notion.

There is even a second antinomy. Quality is the determinate (and it was on this aspect that the ancient philosophers insisted), but at the same time it is ineffable because we cannot determine it at all.

Since we have asserted that it is possible or even necessary to make the distinction between the order of being and the order of knowing, we shall place ourselves in the order of knowing and shall thereby be led to put quality first. Or at least, since we have said

¹ However, it should be noted that in the *Timaeus*, one of his latest dialogues, Plato connected the idea of number with the idea of limit (a development foreshadowed in some of his earlier dialogues) and took the same direction as the more modern conceptions.

² Hegel places quantity after quality, but what he calls measure (which is a kind of higher form of quality) may be called quality. As for Hamelin, he seems to hesitate between the two solutions. No doubt, both Hegel and Hamelin ought to have distinguished between two meanings of the word 'quality,' a quality prior to quantity and a quality posterior to quantity. Moreover, they are influenced too much by the logical idea of quantity.

that we can distinguish a quality prior to quantity and a quality posterior to quantity, we shall here take the first, that is, quality as felt, quality without any admixture of quantity, the quality that Bergson has taught us how to see and to circumscribe. Hamelin can well say that quality is susceptible of being thought because it is constituted by an opposition of contraries; but in the realm of feeling, in which we have placed ourselves, the opposition between the contraries is felt and not thought.

The study of quality is rendered difficult by the multiplicity of the realms in which it can be applied. There is, for example, a quality of the judgments, and from this point of view Kant has distinguished reality, negation, and limitation. For Hegel, on the other hand, the categories of quality are Being, Nothing, and Becoming. However, these modes of philosophizing lead us away from the study of quality proper rather than toward it.

Hamelin thinks it possible to express and to classify the kinds of qualities (and his attempt to do so has been taken up again by Lavelle, Nogu  , and Sartre), but his classification shows us the deficiency of his theory. For he divides qualities into those with a predominance of qualitative determinations and those that are susceptible of quantitatively precise determinations. Thus, his classification is founded on the intervention of the idea of quantity into the study of quality. We shall rather make ours the thesis of the adversaries of Hamelin, whom he criticizes for their struggle against the attempts to reduce qualities to something else and for their insistence on the fact that qualities are given as wholes of sensation. Yet it is precisely this irreducibility of quality to anything else that we maintain. As Kant said, the quality of the sensation is always empirical.

[2]

So let us come to the realm of quantity. There are extensive and there are intensive quantities. They were quite well distinguished by Kant when he separated the axioms of intuition, according to which everything given in intuition has an extensive quantity, from the anticipations of perception, which refer to intensive quantity.

It is evident that quantity is more essentially extensive than intensive.

As for the intensity of sensations, qualitative time, and qualita-

tive space, they constitute an intermediary link between quality and quantity.

When we think of extensive quantity, we think naturally of space and time. But with regard to time, Bergson has observed that what makes it quantitative is the intervention of space. (The time we experience in ourselves, which Bergson calls duration, is qualitative rather than quantitative.) And, Bergson believed, it is the intervention of number that makes space in its turn a quantity.³ Yet clearly, according to him, number implies space.

What we have to keep in mind is that there are a space and a time to which quantity is applicable, but which in themselves are qualitative, heterogeneous.

From this we can see that what renders possible the multiple homogeneity of intuition is number. The foundation of mathematics is number rather than the multiple homogeneity of space—unless we say that space and number originate at the same time and in a certain sense from each other.

If we had to choose among the different theories on this point—the Aristotelian, according to which time is constituted by number; the Kantian, according to which number is constituted by space, and space ultimately by time; and the Bergsonian, according to which mathematical time and number are founded on space—we should prefer to accept the Aristotelian and the Kantian. There is quantity, there is thought of quantity, because there is thought of number.

Nevertheless, it is perhaps possible that there exists not only a concrete space and a concrete time, but a concrete number, the number worshiped by savage tribes and invoked by the magicians of number. Indeed, we may go farther and say that perhaps this number is the one to which Kant draws our attention when he shows us that twelve is not simply seven plus five, but that each number has qualities we could call in a certain sense contingent—a point that has been emphasized by Boutroux. And we may go still farther. Number will then appear as—to use Alexander's definition—the constitution of a whole in its relation to its parts, a plan of the totality of the parts. Numbers would thus be, as Alexander says, empirical universals, concrete plans. And we might even tend toward the

³ What constitutes abstract space and abstract time is number; thanks to number, the heterogeneous concrete becomes the homogeneous abstract

Platonic theory of numbers, according to which the real numbers, being qualitative, elude the operations of arithmetic.

The essential relation between quantity and abstract number may be seen in the fact that when Hegel defines quantity in general it is number which he defines. According to him, quantity is identity of terms, that is, homogeneity and indifference in relation to the content. And this definition may make it possible for us at the same time to define abstract space as it is conceived by Leibnitz and Bergson.

Just as quantity is indifferent to its content, so the content is indifferent to quantity, i.e. the generic idea is indifferent to the number of individuals that constitute its logical extension.

The *Logic* of Hegel is not only logic; it is also a history of philosophy. To every determination of Being there corresponds a philosophy. Perhaps it is not very satisfactory to consider, as Hegel does, Eleaticism, the Indian doctrine of Nirvana, and Heraclitus as all representative of the philosophy of quality; but it is much more legitimate to consider (as Hegel does also) materialism and atomism as representative of the philosophy of quantity. Hegel defines materialism as the affirmation that the Absolute is quantity, because he says this point of view in general leads us to give to the Absolute the determination of matter.

Nevertheless, there is, according to him, another theory of quantity, Pythagoreanism. Hegel calls our attention to the inadequacy of the Pythagorean mode of philosophizing on this point. For number is not among the highest categories, and the more nearly we approach the highest levels, the more we see the function of number diminish. Number has a greater place in the inorganic than in the organic world. So, according to Hegel, it is one of the most dangerous prejudices to seek in the quantitative aspect of things for the origin of all differences and determinations.

One distinguishes between continuous and discontinuous quantities. Hegel shows us that these two determinations are equally essential to quantity, and even that continuity implies discontinuity, and discontinuity continuity. Thus, continuous and discontinuous quantities are not to be considered as different kinds, but they are distinguished by the fact that two different views may be taken of the same reality from two different points of vantage. This explains the antinomies of space and time. When space and time are affirmed

with the determination of continuous quantity, they are indefinitely divisible; when they are affirmed with the determination of discontinuous quantity, they consist in indivisible parts. Divisibility *in infinitum* and division into ultimate elements are two truths, each as partial as the other. Continuity and discontinuity are only two aspects, each one legitimately included in the concept of quantity.

Here too the development of science may help us, for the thought of discontinuity always follows the thought of continuity, and *vice versa*. Both are tools, each allowing us to extract, as from a mine, some aspects of the real; but each one of these aspects implies the other,⁴ and the human mind goes incessantly from atoms to ether, from ether to electrons, and so on, always discovering something new, but having always before it something new to discover, until finally it halts before what can no longer be studied scientifically. Yet even what seems to be beyond scientific study may, by virtue of time, fall some day, and for some time, within the field of science, as we see in the recent theories that try to unite continuity and discontinuity.⁵

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The ancients did not have a clear conception of space, for it was mixed with the conception of matter. But around the time of Plato geometry was given form and completeness, and this perfected geometry was later to have an influence on the idea of space that it did not have in Plato's day, although some interpreters of his doctrine have been able to show certain analogies between the space of the *Timaeus* and the space of modern science.

As we already know, for Descartes, space, which constitutes the substance of matter, is an innate idea. It is not received from objects. Taking up again Plato's argument on this point, Descartes shows that if we did not first have the ideas of circles, triangles, et cetera, we should never discover them in experience. This is a fundamental thesis of rationalism.

⁴ In the same manner, Bergson has shown that number, which is discontinuous, implies space, which may be said to be continuous

⁵ In the same context, we might consider the painting of Cézanne. As Meyer Schapiro has pointed out, on the one hand, Cézanne likes to enclose his figures with a strong continuous line, but on the other hand, many of his outlines are made of broken, discontinuous bits of lines, and so the large continuity is made of small discontinuities.

On this question of space we may distinguish two trends of thought in Cartesianism. On the one hand, Spinoza and Malebranche emphasized the infinity of space, which Descartes in most passages preferred to call indefinite. For Spinoza, space is an attribute equal in importance to mind (except for the fact that mind has an idea of space) and an expression of God. For Malebranche, space is more an idea of God than an idea of man. When the geometrist thinks about space, he sees God in so far as God is 'partaken of' by His creatures. This is the theory of intelligible extension. Our one clear idea, on which all the others depend, is the idea of space. On the other hand, Leibnitz says that space is only an appearance, a confused idea, and he sees proof of this in the fact that every part of space is quite like any other part. Now in nature there are no such identities, so space is an abstraction. Another idea of Leibnitz about space is that it is an order, the order of coexisting things. Naturally, the question may be raised whether this definition does not constitute a vicious circle. Moreover, there is something unclear about the theory of Leibnitz: on the one hand, he wants space to be a rational order, and on the other it is, according to him, a confused perception. And there is also this difficulty in his theory: space is in a certain manner implied in the theory of the monads themselves, since Leibnitz says that they are the products of the diverse views God takes from different points of vantage; and the idea of a point of vantage implies something like space. A final difficulty is raised by what Leibnitz calls the labyrinth of the continuous; it is not easy to follow him in the windings of the labyrinth, divided as he is between his tendency toward continuity and his tendency toward discontinuity.

To the rationalist theory we may oppose the theory of the empiricists. The empiricism of Locke is up to a certain point derived from Descartes and his emphasis on clear and distinct ideas. But, according to Locke (at least in the first part of his great work), the clear and distinct ideas come from simple ideas of sensation. So we can readily understand that for Locke the idea of space is not infinite but indefinite, but indefinite in another sense than for Descartes. Whereas for rationalism the finite is posterior to the infinite, for empiricism it is prior to the infinite, which is only a product of abstraction.

On this point there was a controversy between Locke and Leibnitz, as there had been between Descartes on one side and Hobbes and Gassendi on the other; and there was also a controversy between Leibnitz and Clarke, a disciple of Newton. For Newton, space and time were the two organs by which God perceived the universe.

As for Hume, he was particularly interested in the question of the composition of time and space by discontinuous instants and points.

Such was the state of the problem when Kant began to think about it. He could not accept the empiricist theory of Locke and Hume, for this would destroy the validity of mathematics, nor could he accept the rationalistic theory of Leibnitz, according to whom space is a kind of concept and order. Kant asserted that there is in space something irreducible to concepts, as is shown by the distinction between right hand and left, which cannot be rationally deduced. Moreover, space, the space of mathematics, cannot be that confused perception of which Leibnitz speaks.

Leibnitz, it is true, could have answered that one has to distinguish between places, extension, and space. Space is the mathematical order, places are something more concrete, and extension refers to the formation of space (space itself being a kind of distention). But Kant was interested neither in places nor in extension as Leibnitz defined these terms, but only in the foundation of mathematical space.

The problem of Kant was to explain the possibility of the two sciences that seemed firmly constituted at the end of the eighteenth century, Euclidean geometry, which had lasted for centuries, and Newtonian physics. At the same time, he wanted to explain why another science, i.e. metaphysics, had not had the same success. He had to find a single explanation for the certainty of the first two sciences and for the lack of certainty of the last. Moreover, he was struck by the difficulty of solving the antinomies of space: one can say neither that world is bounded nor that it is unbounded; one can say neither that it is infinitely divisible nor that one must stop at atoms or monads.

Now mathematics and physics are founded on what Kant called synthetic *a priori* judgments. Kant's question is: How are synthetic

a priori judgments possible? This Kantian formulation of the problem has to be explained. According to Aristotelian logic, which is followed by Kant, a judgment is the affirmation of a relation between a subject and an attribute or predicate. Now either a true judgment is founded on experience, or it is not. If it is not, it is *a priori*. If it is, it is *a posteriori*. On the other hand, either the attribute adds something new to the subject, or it does not. If it does not, it is analytic. If it does, it is synthetic. So we see that there are synthetic *a posteriori* judgments, such as 'This table is brown,' or 'The sun warms the stone'; and there are analytic *a priori* judgments, like 'A triangle has three angles.' About these two kinds of judgment there are no problems or difficulties. But there are also synthetic *a priori* judgments, like 'A straight line is the shortest distance between two points,' or 'Two plus two equals four,' or 'Every event has a cause.' (It should be noticed that there are no analytic *a posteriori* judgments because it would be useless to look to experience in order to form analytic judgments, which we might have arrived at without experience.) According to Kant, when the mathematician says, 'A straight line is the shortest distance between two points,' he joins a quality, *straightness*, to a quantity, *shortest*; whereas in the judgment 'Two plus two equals four,' this joining of two different domains of thought does not take place. Nevertheless, in the idea of two and two the idea of four is not contained.

According to Kant, synthetic *a priori* judgments are possible in mathematics because we have the intuition of space, that is, we bring with us that great intellectual frame which is space. Space is at the same time what Kant calls an intuition and what he calls a form of intuition. For the fact is that, according to him, forms of intuition are intuitions. So space is the frame and also what is in the frame.⁶

When Kant speaks of intuition, he means to separate space and time from sensations on the one hand—since they do not come from experience—and from concepts on the other.

⁶ It has been said that Kant transferred to man what Newton had attributed to God. For Newton, space and time, as we have said, are the media by which God sees all things. For Kant, time and space are the media by which man organizes what he sees. We might also compare the theory of Kant that space is a form of intuition with the idea of Malebranche that space is intelligible extension. Nevertheless, there is this difference between them: space for Malebranche is purely intelligible.

Space and time do not come from sensations, they are not derived from experience. Rather, they are the origin of experience. If I say that space is taken from external experience, I say only that space comes from space, since the idea of externality implies space. So if there were no space, there would be no experience, and space cannot be derived from experience. On the contrary, it is because we bring with us the idea of space that we are able to constitute experience. This, in brief, is what Kant calls the metaphysical exposition of space. Besides, space is infinite, and nothing that is infinite can be derived from experience. Finally, as Kant says in the transcendental exposition of space, mathematical propositions possess the character of universality and necessity, which can in no manner be derived from experience.

But, on the other hand, space is not a concept. Consider a concept like that of a dog. We form this concept because we have seen many dogs. But we do not construct space in the same manner, by starting from spaces and forming a concept of space. On the contrary, we begin with the single, all-embracing space, and it is only by division of this unique infinite space that we arrive at spaces, the particular parts of space.

As has been said, Kant found a new mode of existence, neither a sensation or a product of sensation, nor a concept. It is something related to sensibility, and this shows that Kant does not agree with the Leibnitzian rationalism, which considers space as a confused, yet intellectual, order. For Kant, space is not confused, and yet it is not intellectual either. Such is the space of the Transcendental Aesthetic—an infinite form given prior to everything and prior to every constitution of it step by step. But such is not the space of the Transcendental Analytic. In arriving at the space of the Transcendental Aesthetic, we pass from the whole to the parts; but in arriving at the space of the Transcendental Analytic, we pass from the parts to the whole, forming the whole by an intellectual process of adding parts to parts. We might perhaps say that whereas the space of the Transcendental Aesthetic is an intuition, the space of the Transcendental Analytic is very close to being a concept. This duality in Kant raises a problem.

All the philosophers about whom we have spoken have identified space with mathematical space. This is particularly true of Des-

cartes and Kant. According to Kant, the common-sense man thinks in terms of mathematical space. But during the nineteenth century certain changes occurred that tended to alter the conception of space. There was the development of non-Euclidian geometry, which seemed to show that we may at least conceive spaces different from our space, even if we cannot imagine them. There was the pragmatic idea that space is a kind of tool or instrument. There were the analyses of Mach and Poincaré, who distinguished many types of space—tactile space, gustatory space, olifactory space, et cetera. There was James, who spoke of the spatiality of our sensations and said that all sensations, and not only the visual ones, possess a kind of massiveness and extensity. Bergson seems for the most part to consider space as—to use the scholastic definition—*partes extra partes*; nevertheless, even in his first book he distinguishes from conceived space a felt space, a space such as animals feel, a space with heterogeneities and qualities.

The consequence of all this was a change of opinion about the necessity and even the structure of space. Going farther in this direction, Whitehead questions two of the presuppositions of Cartesian space. In the first place, there is not in nature that separation of parts from parts which is characteristic of the space of Descartes. A thing is not only where it is; it is also where it acts. In fact, it is everywhere. In this way, Whitehead criticizes what he calls the theory of unique location. Moreover, he questions the separation made by Descartes between mind and space, and he thinks that this bifurcation of nature, as he calls it, is the original sin of modern philosophy.

So we see that the idea of space is constituted, as Berkeley noted, from many different ideas of space. We see also that there is something right in what Kant conceived as the necessary presupposition of mathematics. But after we have seen this space constructed by man in order to situate himself in the universe and to understand it rationally, we must also see, or rather feel, that there is a space prior to this, in which we are merged from the first, a kind of massiveness in things. Or rather, there are things, and it is their massiveness that we experience. When we translate this experience into feelings, we have concrete space, full of qualities and heterogeneities; and when we transfer it to an intellectual frame, we have

mathematical space. But the primordial reality is things and their density and opacity.

We might also draw attention to some other recent reformations in the conception of space. For example, according to Einstein, space is finite; and according to recent theories of physics, it is discontinuous. But rather than these modifications, what we want to stress is the concrete conception of space toward which it seems that science is leading us.

Finally, the idea or even the feeling of space vanishes, to leave us in the presence of things: by their being before or behind one another, at the left or at the right of one another, things produce in us that idea of space which so many thinkers believed to be *a priori* but which is only an *a posteriori* construction.

So we have seen that, for the ancients, quantity was the more and the less, conceived as the products of an indefinite movement, and that this conception of quantity was destroyed by modern science when it showed that the more and the less are susceptible of precise measurement. Then the ancient view was replaced by the conception, already suggested by some scholastics, that quantities (we mean here spatial quantities) are defined by 'the parts being outside the parts.' But this very conception of 'the parts outside the parts' has been in its turn destroyed by the modern progress of science.

From the point of view we have reached, we might say, taking up again the theories of Leibnitz and Kant in their mutual opposition, that the doctrine of Leibnitz is right inasmuch as it allows us a more concrete conception of space, according to which space is only a consequence of the real relations among things, and that the doctrine of Kant is right inasmuch as it shows that space is not a rational order but is closely related to sensibility. The purpose of a new theory of space would be to join what is true in Leibnitz and what is true in Kant; and this can be done, up to a certain point, first, if we start from the remark of James about the extensity of our sensations, and secondly, if we remodel the theories of both Leibnitz and Kant in accordance with the new suggestions presented in modern thought and science.

Here again we may find something analogous to what we have already found in our study of form and matter. Space is not a form

separate from matter (except intellectual space, which is a fiction). It is not even a form given with matter. It is simply a manner in which matter appears.⁷

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Ancient mythology represented Chronos, the divinity of time, as the son of the sky; and Chronos was figured as devouring his children. Every event is engulfed by time.

Plato says very often that the originators of the philosophies of change and time were the two poets, Homer and Hesiod, who said that the father of all things was the ever-changing Ocean.

Although an exponent of the philosophy of time, Heraclitus saw the difficulties in the concept; but, for him, they did not constitute an objection to his theory, because he believed that all reality is self-contradictory and lives by virtue of this very self-contradiction. For Eleatics like Zeno, on the contrary, the difficulties in the concept of time were a motive for abandoning the affirmation of the reality of time and for affirming the timelessness of the Absolute. According to Zeno, the arrow that goes from one point to another is at every moment at one determinate point, so that it does not move, since to be at a determinate point is to be at rest.

Plato had a wider view of reality than either of these two schools of philosophy, for, as we have seen, he conceived of two worlds, the sensible as well as the intelligible. He regarded time as the representation of the intelligible world in the sensible world, that is, he defined it as the fugitive image of eternity. On the other hand, he linked the idea of time with the idea of the soul, the beginning of the soul is the beginning of time.

Aristotle tried to define time in a more physical manner and to unite it with physical movement. Time was no longer defined metaphysically as an image of eternity or a movement of the soul, but rather, we might say, physically, as the ordinal number of the movement, indicative of what comes first and what comes next.

We have already said that with Christianity a greater emphasis was placed upon time. In fact, on this point Christianity returned to

⁷ There would still remain the highly metaphysical question. How does it happen that there is space? Plotinus and Bergson, in representing space as distance, as distention, suggest the idea that space is only an interval appearing between the real and the real and, we may add (according to some suppositions of Leibnitz) that it appears in order that the principle of non-contradiction may be kept

Platonism. But what is more important is that questions were put about time and that in Saint Augustine in particular the riddles of time were placed in the foreground. When I think about time, he said (inspired, it is true, by some formulas of Plotinus), I find I know nothing about it; but when I do not think about it, I know it very well.

Nevertheless, it was not until much later that the problem of time came to occupy a central position in philosophy. According to Descartes, while space is a substance, time is only a mode.

What is interesting in Descartes in this context is that he does not accept either the Platonic or the Aristotelian conception of time, although he does try to improve the Aristotelian definition and does retain the Platonic notion that what is important is not the succession of instants, but rather something outside time. Yet, whereas this 'outside time' is, according to Plato, eternity, for Descartes, it is eternity under the aspect of the instant. Light transmits itself instantaneously. The *cogito* is intuited in the instant. And we might say that it is in the instant that essence produces existence.

For Spinoza, as for Descartes, time does not have the same importance as space. Moreover, Spinoza gives the perfect definition of the whole Platonic trend of thought when he asks us to see things under the aspect of eternity. As for Leibnitz, he is faced with nearly the same difficulties about time (or even greater ones) as about space. On the one hand, time is only a confused appearance, and, on the other, it is inherent in the constitution of the monad itself, which passes from perception to perception.

What we have said about the Kantian theory of space is very nearly true also of the Kantian theory of time. First, we may observe that with regard to time as well as space Kant applies to man what Newton attributed to God. From this it would seem, at least at first sight, that Kant puts space and time on the same level, but space is the form of external phenomena, and time is not only the form of internal phenomena, but indirectly of external phenomena as well, since they too are in consciousness. Moreover, not only has time a wider field of application than space, but it has a more fundamental function, since it is related much more directly to the activity of the Transcendental Ego; and the schemata, i.e. the more imaginative representations of the categories, take place in time. Kant shows how such categories as causality and substance imply time, causality

being related to the succession of events, and substance to the permanence of certain elements.

The conclusion of the Transcendental Aesthetic is that time as well as space is only a form of human understanding, that things as they appear to us are in time, but not the things-in-themselves. Now we ourselves are things-in-themselves, since we are able to determine ourselves by the moral law. Thus, the conclusion of Kant is that all phenomena are controlled by the law of causality, but that we, as things-in-themselves, are outside time and, by virtue of this very fact, are not determined by preceding motives, since we live in a sphere in which there is no real succession. From the scientific point of view, our actions appear as determined; but from the more metaphysical and moral point of view, they may and must be free; so they are free.

Schelling and Schopenhauer, the successors of Kant, claimed a more real and fundamental place for time. We might also find indications in the same direction in the French philosopher Guyau. But it is with Bergson that the two great frames that Kant had, at least in appearance (or rather, only in appearance), put on the same level were given a completely different importance in reality. For Bergson, space is only a kind of network we throw over experience in order to organize it; whereas time, not the spatialized time of common sense and science, the time of clocks and watches (which ultimately is only an aspect of space), but the inner time of our experience—what Bergson calls *duration*—is the stuff of which reality itself is made.

In this concrete time there is no separation of moments. When we hear a sentence or a melody, we cannot separate completely the words or the notes we hear now from those we have heard an instant before and those we shall hear a moment after. There is a perfect continuity, and the differentiations are only abstractions.

If this is so, we do not have to accept the deterministic thesis of the associationists, who explain everything by what went before; nor do we have to accept the Kantian thesis, which vindicates freedom only by putting it in the realm of things-in-themselves, something unknown to us except through moral action. According to Bergson, we may experience our freedom here and now.

The abstract scheme of time that dominated human thought from Descartes, and even from Aristotle, to Kant disappears, and what

remains as a thing-in-itself (a knowable and known thing-in-itself) is only change. Change and time appear as the ultimate reality.

We might say with regard to time what we have already said with regard to space. After having seen that there is a concrete time different from the abstract time of science and common sense, we have to observe that even concrete time is not the ultimate reality; the ultimate reality is rather things, that is, in this case, events. What is really given to us is events after other events or before them or occurring at the same time; and from these experiences of 'after,' 'before,' and 'at the same time' we construct the scheme of time. Naturally, we shall be told that what we say is a kind of vicious circle, since these very determinations seem to imply time. But such an argument, even if it seems logical, does not take into account the profound feeling for events, a feeling prior to any conceptualization, and from this point of view the argument would appear rather verbal than logical. What we wish to do in stressing these three determinations of time is to direct attention to the feeling for what is more real than every concept and every word, i.e. the passing of events.

We take consciousness of this passing of events in such experiences as regret, remorse, hope, and expectation. Our intellectual sense of time is the consequence of many particular affective experiences by which we come into contact with what is real in time, that is, the events which appear in it.

And here again, as with space, what is important is not so much the affirmations of the finitude or of the discontinuity of time which we find in some recent physicists as that concrete experience to which we have alluded and to which we can make nothing but allusions.

We must also take note of the fact that space and time are no longer separated so strictly as they once were. And this absence of separation does not come from a transformation of time into space, such as Bergson criticizes, but from their intimate union in a whole that comprehends them both.

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Concerning the constitution of time itself, in so far as we may for a moment consider something which could be called time-in-itself, a question that has been very important since Zeno is the relation of

time to the instant. Time has been considered as constituted by instants (the theory of the Pythagoreans, of some Arab philosophers, and, up to a certain point, of Descartes, Renouvier, and James), or as a continuity that is not at all composed of instants (the theory of Bergson and at some moments of James also), or the instants are not the components of time, but are nevertheless the elements into which time can be analyzed (the theory of Aristotle and also of Leibnitz). This last theory may go with the second, and so we can oppose both of them to the first and prefer them to it.

But even if the idea of discrete instants as the components of time seems unproved, it has, nevertheless, an aesthetic and moral value. Through the idea of the instant, man may hold out to himself the hope of reaching what we might call an immanent feeling of eternity, as opposed to the transcendent idea of eternity that most of the religions give him. As early as in the *Parmenides*, after having presented the two hypotheses of the One that is nothing and of the One that is everything, Plato says that the mind goes from the former to the latter in that strange part of time which is the instant. On the other hand, we have already referred to the importance of the instant in the philosophy of Descartes. At each important step of his philosophy, from the *cogito* and the transmission of light to the creation of God by Himself, we find actions that happen in the instant rather than in time, for Descartes is afraid of time, since, according to him, it is related to memory, which may be fallible. And this importance of the instant is easily explainable, because for him truth is essentially seen by intuition, that is, a state of mind that takes place in a single moment. In two philosophers very different from him, Kierkegaard and Nietzsche, we again find this insistence on the instant. For Kierkegaard, the instant is essentially the religious instant, in which God becomes incarnate, in which the infinite becomes finite. For Nietzsche, it is a lyrical or prophetic instant, outside any accepted religion—the instant in which we realize at the same time that immanent equivalent of eternity and that assertion of the passing of time which is the eternal recurrence. We find the same presence of the instant in such contemporary writers as Proust, Gide, and Virginia Woolf, and a contemporary critic, Saurat, has defined modernity as this quest and cult of the instant. So we may say that even if there is no metaphysical justification for the importance given to the instant, there is, nevertheless,

in man, particularly when he is deprived of the older images of eternity, a need of seizing the real in flashes of insight, in lightnings of intelligence, in sparks of enjoyment.

Kierkegaard and after him Heidegger have expressed the idea that from the three distinctions that have been made in time—the future, the present, and the past—the most fundamental one is the future. As Heidegger says, man is essentially directed toward the future. In Hegel also we may find this insistence on the future.

One of the ideas of Heidegger that have attracted much attention is that there are fundamental differences among the past, the present, and the future, which in some passages appear to be for him quite heterogeneous elements of time. But we must observe also that he considers the present as formed by the past and the future. If we analyze the present as it is experienced by man, we shall find, according to Heidegger, that it is essentially a tendency toward the future and a being circumscribed by the past. This circumscribed *élan* is the present.

We may also find in Bergson a theory of time according to which the present, the past, and the future are in no manner analogous. In fact, for Bergson, most of the mistakes of the preceding philosophies come from the fact that they represent the future on the model of the past. But, according to him (and according to James as well) to affirm the future is to deny every possible determination of it. The real future is not contained in the past. And real time is ultimately the time of the future. As for the past, either it is a kind of translation of time into spatial terms, as in *Time and Free Will*, or it is mind itself considered as memory, as in *Matter and Memory*. We must add, nevertheless, that in *Time and Free Will*, alongside the past considered as space there is a past that continues into the present, as the past notes of a melody are continued in those we hear now. As for the present, it is defined in *Matter and Memory* as what is active, what prolongs itself into actions of the body. So the three moments, or, as Heidegger says, the three ecstasies of time, are defined in a rather precise manner by Bergson. Here we see a kind of moving, three-sided canopy, which our being extends over itself at every instant. Whatever its explanation may be, the fact is that this structured time spreads around us, or rather the structured events that constitute time.

Although the problems of time were studied by the ancients, from Zeno to Augustine, they have taken at least an apparently clearer form with the modern philosophers. It is rather characteristic that Lovejoy has defined one of the chief philosophical tendencies of modern times as temporalism; and it is also characteristic that Alexander asks what would have happened if Spinoza had given as much importance to time as he did to space and had made of it an attribute.

In fact, however, the problem of time has never ceased to occupy the human mind; and one need only consult the medieval commentaries on the Bible to see how many questions were then raised about time; as for example: Do the angels live in time or in eternity or in something that is between time and eternity and which some have afterwards compared to the Bergsonian duration? What does the Bible mean when it says that the dead at the moment of the Last Judgment will revive *in ictu oculi*? And so on.

We could also have asked questions about the genesis of time and recalled the Neo-Platonic solution, according to which it is a kind of distention, a separation of what was first united; and to this metaphysical hypothesis we might add the logical explanation that time is necessary for things to obey the principle of contradiction, which in some of its formulations seems to assert that two contradictory propositions cannot both be true at the same time.

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We may now undertake the study of the intensive quantities. Kant defined them when he opposed them to the extensive quantities. The latter are those in which the representation of the parts renders possible the representation of the whole. It is no longer in the course of time, it is in the instant itself, that we shall discover that third dimension, that depth of quality which is intensity. Kant sees in intensity a purer form of quantity, in which we pay less attention to time and space and which takes place in the instant.

This sentence of Kant about degrees that fill the same time is the starting point of the theory of Alexander on intensity. According to him, extensive quantities are the expression of the fact that space is a duration or that time sweeps over space in its flight. Extensive quantity, in other words, is the occupation of a space by its time or the occupation of a time by its space. But intensive quantities are

the passage of different spaces at one and the same time or the occupation of the same space at different times. The simplest case of it (and it is also the one that Hegel cited) is that of swiftness. We might also take the case of sound. There is intensive quantity when, the space remaining constant, the time varies; or when, the time remaining constant, the space varies. Intensive quantity is a matter of concentration. Going a little farther, we could say, according to Alexander, that intensity is a relation of time to space that takes place by virtue of the continuity of both.

Hegel put the question whether intensive quantity, which he called the degree, is not different, in its very concept, from extensive quantity, and he solved it by affirming the irreducibility of intensive to extensive quantities. He criticized the physicists for trying to explain light or heat or weight in terms of a greater or lesser intensity of the atoms or of the particles of light. For him, these are purely metaphysical hypotheses. Atoms are only the hypothesized products of the abstract understanding of the multiplicity of things. Abstract understanding, according to Hegel, considers extensive quantity as the one form of quantity.

One can easily see what is unsatisfactory in such considerations. They are not true to the fundamental endeavor of science; and it seems that Bergson is nearer the truth when he reduces intensity to quantity.

Alexander says that whereas it is possible to measure extensive quantities directly, it is possible to measure intensive quantities only indirectly. Yet, according to him, the measurement of intensive quantities, for all that it is indirect, is not the less possible.

We seem to have to choose between a theory denying the possibility of measuring intensive quantities and a theory affirming it, that is, between Bergson and his adversaries. But it can easily be realized that the two theses on this point are not so opposed as they appear; for Bergson acknowledges that there are intensities, and that they are measurable indirectly according to the number of movements they excite, and Hamelin and Alexander admit that the measurement of intensities can be only indirect.

We may add also that after having seemed to destroy the idea of intensity, Bergson reinstates it in a more metaphysical form under the name of tension.

Just as Hegel shows that there are no purely discontinuous and

no purely continuous quantities, so he also shows that intensity and extensity cannot be completely separated from each other; these two determinations of quantity must not be conceived as two independent kinds. Every extensive quantity, according to him, is at the same time intensive, and *vice versa*.

For example, to every degree of temperature there corresponds a certain extension in the length of the column of mercury. Indeed, Hegel (rather questionably) maintains that this observation may also be applied to the realm of the mind: a more intensive character extends the range of its actions more widely than a less intensive character. So intension and extension, as well as continuity and discontinuity, are categories of quantity, i.e. determinations of every quantity, rather than different kinds of quantity.

[7]

Up to this point we have considered quantity and quality as separated from each other. Nevertheless, we have seen that there is a quality of quantity; and on the other hand, we may define intensity as a quantity of quality. We shall now see that these two concepts tend toward each other and are intimately united in the idea of measure. According to Hegel, through the concept of measure, quantity returns to quality or rather, through quantity the mind ascends toward a higher quality. Notwithstanding appearances, in measuring one always takes account of quality. Thus, one measures the lengths of different strings in referring them to the tones that arise from their vibrations.

Applying, as is his custom, his study of the concepts to the history of philosophy, Hegel states that measure, being the unity of quality and quantity, is taken as the fundamental reality by some systems, which are superior to those based on quality and those based on quantity. In Greek philosophy and mythology, Fate, under the aspect of Nemesis, represents this idea of measure. In the Old Testament, God is the Being who imposes on everything, on sea and on land, on rivers and on mountains, on beasts and on men, determinate measure. But it is particularly in systems like those of Plato and Aristotle that measure comes into its own.

We have seen that, according to Hegel, the realm of inorganic matter is dominated by quantity and the realm of thought by

quality. But there are also realms in which measure is dominant. the solar system and organic nature. The different kinds of animals conform, as wholes as well as in their parts, to certain measures. Between these two realms we find inorganic matter, where measure passes into the background. We must add, however, that the quantity in inorganic matter—for example, the quantity of a stone or of a river—is not absolutely without measure, and also that in the organic realm the most undifferentiated beings, those that are nearest inorganic matter, are distinguished from the higher organisms by the coarse indetermination of their measure.

According to what we have said, the transition from this or that quantity to this or that other quantity involves at certain moments a difference of quality. It might be said that knots of certain kinds are formed in the processes of nature.

But, according to Hegel, there is something unsatisfying in the idea of measure, although it is a synthesis of quantity and quality and therefore superior to both of them. The inadequacy of the idea of measure arises from the fact that it establishes between quality and quantity a purely immediate union. We are here confronted with what may be called the antinomy of measure, which the Greek Sophists presented in many different ways. There are some moments in which differences of quantity produce a difference of quality (the sophism of the heap of sand and the sophism of the bald man). Hegel says that we might apply this observation even to political ideas: the constitution of a state depends more or less on the number of the citizens and on the space it occupies.

So we conclude this dialectics of quantity, which we have studied according to the indications of Hegel. We have seen quality passing into quantity, then quantity into quality, and then both into measure. But measure itself has for its antithesis excess, for there are things that go beyond their measure, and so, according to Hegel, the whole category of measure has to be superseded by a higher one, that of essence.⁸

[8]

What are the relations between quality and quantity? Descartes seemed to think that they are mutually exclusive terms. Nevertheless, it must be noted that he explained sensible qualities in terms

⁸ Here we have not followed Hegel's path but have found essence earlier in our investigation.

of quantities, and on the other hand he explained everything, finite qualities as well as finite quantities, in terms of the infinite quality which is God.

The sequel of the Cartesian explanation of quality in terms of quantity may be seen in Leibnitz, who no longer opposed but conjoined them. For example, music is the pleasure of the mind which does not know that it counts.

But in spite of this attempt to explain qualities in terms of quantities, it remains true that Descartes, on the whole, separated them from each other and excluded qualities from reality. This is what Whitehead has criticized as the bifurcation of nature: in reality there would be quantity without quality, and in the mind there would be only illusory appearances of qualities. According to Whitehead, the consequence of this bifurcation has been a barren and mechanistic conception of nature. And this bifurcation is quite arbitrary. We might complement Whitehead's views on this point by citing Hamelin's statement that to exclude is to acknowledge the existence of what one excludes, so that the foundation of classical physics was the existence of quality. On the other hand, as Hamelin points out, according to the indications of Leibnitz, force and movement are qualitative, so that mechanism requires more than quantity.

We know also that in opposition to classical physics some physicists, such as Duhem and Ostwald, have tried to constitute a physics of quality. This attempt is probably bound to fail. But a Bergson, a Whitehead can construct a philosophy of quality.

So we find doctrines that tend to reduce quality to quantity (Descartes), doctrines that tend to deny the importance of quantity in favor of quality (Bergson, Duhem, Whitehead), and doctrines that try to affirm both at the same time (Hegel, Hamelin).

As we have seen, these last doctrines may find corroboration in the fact that science itself implies quality as its starting point and even as one of its elements; and this argument may be supplemented by reference to the fact that, on the other hand, quality may be explained in terms of quantity. According to Hamelin, every quality depends on space, and this in two ways: first, in the perceived object, and secondly, in the consciousness of it. For how can we consider color as detached from every kind of space? A color is

a colored surface. It is by abstraction, according to him, that we separate quality and extension. The body as extended, and even the consciousness we have of the body, are things simpler than quality and prior to abstraction, so that, Hamelin continues, the fact of consciousness, in the qualitative order, is not deprived of extension, but has an extensive aspect. However, in these last considerations it seems that Hamelin goes a little too far; for the extension of which he speaks is no longer the quantitative extension that science and common sense consider, it is rather the qualitative space to which we have already drawn attention.

It remains true that in the order of knowledge, quantity presupposes quality, since, as we have seen, the starting point of science is observation of qualities, which it translates only afterwards into quantities; and in the order of being, quality appears as the product of quantity. On this last point, we may find some light in two philosophers, Bergson and Alexander, the first of whom we have classified as a philosopher of quality.

Hegel defined quantity as suppressed quality. Bergson and Alexander have defined quality as intensified, concentrated quantity. In fact, science has shown that colors are vibrations and ultimately numbers. This does not mean that quality is not real, but only that, on a lower plane, it is a quantity. Quality is quantity concentrated, put on a higher plane. This is the theory of the emergence of quality from quantity.

Here we have to pay attention to the different levels of the real. Materialism is wrong if it thinks that reality is purely quantitative. It does not take into account the different levels of reality. To be sure, there is a level at which quantity is real. But there is also a level at which the most real thing is quality, and this is the level of our perception and comprehension, when the parts outside the parts, the numbers outside the numbers, are assembled into colors and stars (to unite Browning and Meredith).⁹

Quantity and quality are complementary aspects of reality. Each continually passes into the other. The world is full of qualities. Here again we find an idea analogous to the one we have presented

⁹ 'And I know not if, save in this, such gift be allowed to man,
That out of three sounds he frames, not a fourth sound, but a star'
Abt Vogler

in considering the problem of matter and form. In fact, quantity is a particular view taken of matter; and it is not astonishing that, just as matter flows into forms, so quantity, which is an abstract aspect of matter, should flower into quality.

According to Alexander, qualities are the forms that the spiritual element of things, which he calls either time or soul, assumes at every new level of reality. With each new quality there is a new constellation or collocation of movements, and this collocation possesses a new quality, which characterizes the superior level. This new quality may be completely expressed in terms of the preceding level from which it emerges. So life is a complex of material bodies, and thought is a complex of living bodies. At every level the new quality is expressed in a new simplicity. He compares this process with what happens in the mind of the man of genius when many different ideas are concentrated into a new simplicity.

We see how Alexander solves the problem of the objectivity of qualities. For him, qualities are real. On this point, we must face the question of the distinction between primary and secondary qualities, a distinction of which the concept may be found, among ancient philosophers, in Democritus, and among modern philosophers, in Descartes, and whose explicit expression may be found in Locke. According to Locke, solidity, extension, figure, movement or rest, and number are primary qualities; and bulk, figure, color, odor, et cetera are secondary qualities.

But, as Berkeley has shown, such a distinction cannot withstand analysis. In view of the analogies he demonstrates between color and pain and between primary qualities and color, there remains nothing, according to him, but qualities about which we perhaps might say, according not to his own but to his adversaries' terminology, that they are at the same time primary and secondary—primary because they are real, secondary because they are in the mind.

It is obvious that the position of Alexander is very different from that of Berkeley; nevertheless, it is nearer to the position of Berkeley than to that of Locke.

It is interesting to note the insistence on the objectivity of qualities to be found in Alexander, Whitehead, and Bergson. All those who do not believe in the objectivity of qualities, says Alexander, have

neglected the difference between the act of apprehension of the mind and the non-mental act, which is apprehended. We see here how the attitude of Alexander may be compared to that of the phenomenologists.

One consequence of the belief in the reality of qualities would be, according to Berkeley and Bergson, the destruction of materialism, at least in its classical form, since matter for it is made only of primary qualities, but if we reinstate in matter qualities like colors and odors, it ceases to be the mechanical matter of classical materialism, and there is much more possibility of bridging the gap between matter and man.

We see also how the consequence of the Cartesian bifurcation of nature has been materialism, to which Descartes certainly was most opposed; and how Berkeley, in destroying the difference between primary and secondary qualities, tended in the same direction as that taken by Bergson, Whitehead, and Alexander. In fact, according to Berkeley, his theory that qualities are in the mind is in no sense a denial of qualities, since it attributes to them the most real existence one can attribute to anything, that is, existence in the mind.

We have already said that we may distinguish between philosophies of quality and philosophies of quantity. There are philosophies like those of the Pythagoreans, and, in more modern times, of Renouvier, which reduce everything to number or affirm that the laws of number control everything. There are philosophies like that of Democritus, which reduce everything to numbers as materialized in parts of space, that is, atoms, which are at the same time innumerable. And there are mechanistic philosophies, which reduce everything to space and movement. On the other hand, we find philosophies of quality. This quality may be force or rather a plurality of forces, as in the philosophy of Leibnitz, or Will as in Schopenhauer, or Mind as in Hegel. But perhaps the philosophers who have most strongly and most explicitly insisted on the qualitative aspect of things are the French philosophers Boutroux and Bergson.

We might say that there are two conceptions of simplicity, one stemming from the philosophies of quantity and the other from the philosophies of quality. The first is a homogeneous simplicity

of things identical with one another; the second, the simplicity of heterogeneous qualities.¹⁰

As for materialism, in so far as it is mechanistic it must be considered a philosophy of quantity. But if, in response to the criticism that Hegel, for example, made of it, materialism were to free itself from this category of quantity, we could then conceive it as a philosophy of quality.

The history of philosophy shows us how very soon man was struck by the possibility of giving a quantitative explanation of things. Pythagoreanism is only one proof of this tendency. Indeed, just as Pythagoreanism has a scientific background, so science has a Pythagorean background. The scientific scheme of things, which tries to reduce quality to quantity, works. And we have to take quantity, if not at its face value, at least at its use value.

But again we must emphasize the fact that quantity is always a quantity of some quality and that quality is the starting point of scientific research. The simple, says Hamelin, does not destroy the composite, it dominates it. Quality is the quality of quantity. In the same manner we might say that at our human level we see qualities and that quantity is only the substructure we discover for the qualities that we see. There seems to be something like a quantitative substructure—what we might call a numerical or mechanical skeleton of things. But what is given to us is not the skeleton, it is the living individualities of things with their colors and flesh and pulsations.

We may observe, moreover, that it is one of the highest faculties in us that discovers this substructure, that it seems to be the destiny of man to find through what is highest in himself what is lowest in things. Thus, science may be defined as at the same time a manifestation of one of our highest activities and a discovery of the quantitative substratum of things.

Now we are again faced with the problem whether we have to conceive, with Taine and Spencer and more recently Alexander, an emergence of qualities; or, with Plotinus, Leibnitz, and Bergson, a descent of quantities from qualities. There are two problems here,

¹⁰ According to Bergson, there are two conceptions, absolutely different, of identity and otherness, depending upon whether one sees things from the point of view of quantity or of quality.

which are connected with each other: which of the two, quantity or quality, is the origin of the other, and which of the two is the truth of the other—if we give to this word ‘truth’ the meaning Hegel gave it, that is, the end rather than the origin, the moment in which the reality of a notion is finally revealed. We may put the first of these two problems in the following form: from quality to quantity, is there only a difference of quantity, or is there a difference of quality? According to Plotinus, Leibnitz, and Bergson, quality, extending or distending itself, gives rise to quantity. But let us observe that this is already, by virtue of the introduction of the idea of tension, to express quality in terms of quantity. For it is not difficult to prove that in the idea of tension, as well as in the idea of intensity, there is an intrusion, although less explicit, of quantity into quality. These observations would lead us to conclude that quantity cannot be born from quality unless it has already been placed in quality. So we have to say that between quantity and quality there is a difference of quality, which perhaps is only a difference in point of view. This thesis, far from being necessarily the affirmation of the superiority of quality, shows equally well that quality is irreducible to quantity.

But, if we try with Spencer and Alexander to derive quality from quantity, there must nevertheless be, for this assembling of quantities in qualities, an active receptacle, mind. No doubt mind does not create qualities; and on this point we agree with Alexander. At least, if there were no mind (or perhaps it would be better to use a more general term—the being for which quality is an object), we should not know that there is quality. It is true that the supposition made in saying, ‘if there were no mind,’ may be questioned, and that every question that begins with an ‘if’ is illegitimate. So we have to say simply: quality presents itself to quality, the objective quality presents itself to the quality which is mind.¹¹

Therefore, quality cannot be born from pure quantity nor quantity from pure quality. Thus, there are probably two points of view here: mind, on the qualitative level, and the senses assemble the aspects of the world (and this is already a qualitative expression)

¹¹ Here we do not have to choose between the Bergsonian *élan vital* and the emergentism of Alexander. We may observe that qualities, according to Bergson, may be considered as composed of concentrated quantities. According to certain other passages, we might say that the *élan vital* immerses itself in quantity and then emerges from quantity.

into qualities and things; mind, in its quest for quantities, disunites the aspects of things into numbers and parts of space.

However, there is a difference between quality and quantity. We have said that quantity does not come from pure quality (since we must say that it comes from a quality already affected by quantity). We have said too that quality does not come from quantity, because the former implies a quality to which it presents itself. But this last observation is equally applicable to quantity; for quantity is found by a process of abstraction that implies mind.

So we should be led to affirm a kind of supremacy of quality over quantity, at least from the point of view of knowledge.

From the point of view of reality, we might say that one is as essential as the other; in fact, each grows from the other. Expressing our idea in terms that might seem to be borrowed from Leibnitz we may say that God is at the same time mathematician and musician.

Here we see two realms very closely united to each other. Hegel's idea that there are domains of reality to which quantity is peculiarly applicable and other domains to which quality is to be exclusively applied is only superficially true. Even in inorganic nature, quality and quantity are not so sharply separated as he says.

We shall always have these two points of view, the one that there is at the bottom of things an abstract homogeneity, and the other that there is a concrete heterogeneity. It would be interesting to insist on this idea of the concrete—'concrete' meaning a mutual increment or growth.

There is a special difficulty in the idea of quality, for it is in a certain manner the idea of determination. But this determination, if it is felt from the inside, ceases to be determinable. Quality as seen in itself, or rather as felt in itself, is interiority; and from this exterior interiority—color, for example—to the interior interiority, i.e. thought, and from this interior interiority to the even more intimate interiority that is its origin, we are always descending (or perhaps ascending) toward the ineffable. To circumscribe a quality, we have to distinguish it from others and so to trespass to a certain extent upon the domain of quantity.

Quality is ineffable; quantity is measurable. Between these two extremes language exists. When we reach either one, it ceases to exist, at least in its specific form.

We have insisted on the duality of quantity and quality and also

on the relation of each to the other. They are like interiority and exteriority. If there were no exteriority, there would be no interiority, or at least no feeling of interiority; and *vice versa*.

We may now ask ourselves the question whether both quality and quantity do not come from a deeper reality in which each may participate, but which, by virtue of its ineffability, would be nearer to quality (although we could also find it in qualitative extension, the source of quantity), or whether they are the expressions of something deeper—quality being the expression of the Absolute One, and quantity of the Absolute Other—neither one conceivable without the other (although in what Aristotle called the order of being the possibility of one without the other may be conceived).

But such a metaphysical question can probably have no answer, except the one, or rather the two, presented to us by Plato: first, that there is a union of the One and the Many and that the one without the other would be a sheer abstraction, and secondly, that, nevertheless, we see this ineffable presence of the One in those moments in which we are lifted toward it in a kind of ecstasy by the *élan* of the mind.

VALÉRY has said, 'Les notions de causalité et de réalité me paraissent bien grossières.' We shall have to see what is true in this statement.

[1]

We shall first study the notion of causality as it has appeared in the course of the history of philosophy.

In the *Meno* Plato speaks of what he calls 'reasoning by the cause.' He says that in order to transform our perceptions into scientific conclusions, we must first stabilize them, i.e. prevent them from escaping our memory and attention. In the *Philebus* he pays attention to what was later to be called the formal cause, and in the *Timaeus* to the efficient cause; and he distinguishes the cause proper from the occasion, which only helps the cause.

Aristotle distinguished four kinds of causes. Let us consider a statue. The material cause of the statue is the matter or stuff from which the statue is made—the marble or the bronze. The formal cause is the idea of the deity or man represented by the statue. The efficient cause is the action of the artist on the marble or the bronze—the strokes of the hammer. And the final cause is the end for which the statue is made—the ornamentation of a temple, for example. According to Shadworth Hodgson, we may divide these four causes into two pairs: the material and the formal, which are, as it were, present and immanent in the statue; and the efficient and the final, which may be said to refer rather to its formation and destination.

This example already shows us a significant feature of Aristotle's theory of causality: it comes from observing the fabrication of works of art, or more generally, from the observation of human actions.

We must notice also the relation between the theory of cause in Aristotle and certain psychological and logical considerations. As regards psychology, it is noteworthy that the relation between the cause and the effect is conceived as the reverse of the relation between the end and the means in an act of will, the means being the cause and the end the effect. As for logic, we may remark that the cause plays the same role as does the universal or the essence in the syllogism. And all this has to be related also to the general conception of Aristotle that an action is a passage of Potency to Act: the strokes of the hammer transform the matter, which is Potency, into the statue, which is in Act.¹

With regard to the ideas of causality held by the other philosophers of antiquity we have very little to say—in fact, nothing—except that the Stoics, in their insistence on the interdependence of all the phenomena of the universe, even justified the superstitions of the soothsayers, and that the skeptic Aenesidemus, pointing to the differences in time and quality between the cause and the effect, criticized the idea of causality and subjected it to his skepticism. It was the Aristotelian conception that remained prevalent during the Middle Ages. But with the progress of science in the sixteenth century, and perhaps also under the influence of the Biblical conception of God as creator of the universe, there came a change in the conception of causality.

We find in Galileo the double idea of cause as temporal succession and as rational necessity. Of these two ideas an empiricist philosopher like Hobbes kept only the first and conceived the cause as the sum of the antecedents of the effect. Descartes, on the contrary, as well as those who followed him, like Spinoza and Leibnitz, kept only the second idea, that of rational necessity.

We might say that the second great stage in the history of the idea of causality (the first being represented by the Aristotelian conception) is the seventeenth-century theory that did away with the final and the material causes. The material cause is not really a cause. As for the final cause, for Descartes as well as for Socrates, it is reserved to the consideration of God. So only two causes are left, the formal and the efficient. They are united in the thought of

¹ Although Aristotle sometimes pays particular attention to the efficient cause, as in his example of the eclipse of the sun, ordinarily he remains faithful to his conception of the four causes

Descartes, and this is probably one of the reasons why he insists so much on the idea that God may be considered as acting in relation to Himself as an efficient cause, or more exactly as what Descartes calls a quasi-efficient cause. Thus, in this case essence is the cause of existence. If God is understood, accordingly, as the quasi-efficient cause of Himself—if, more generally, the effect is not separated from the cause by any interval of time—we see how close to each other the formal and the efficient causes are in this philosophy. In fact, Descartes considers the term 'cause' as equivalent to the term 'reason'; Spinoza compares the relation of cause and effect to the relation between the nature of the triangle and its properties; and Leibnitz says that causes are 'taken from the reason which has to be given' for phenomena.

The empiricist conception of cause was presented by Locke. A curious development may be traced in Malebranche, a follower of Descartes and not himself an empiricist. Malebranche reserved all efficacy, all causality, to God. Thus, it is not true that every event is produced by the preceding event; the truth is that, solely by virtue of the operation of general laws, when one event occurs, its so-called effect, without itself being produced by the antecedent event, occurs also. This theory of causality may be compared in some respects to that later developed by the empiricist philosopher Hume. According to Hume, it is only by the force of our imagination that we think there is in the cause a force that produces the effect. When one billiard ball strikes another, there is no force in the one that would entitle it to be called the cause of the movement of the other. Even when we pay attention to what happens in ourselves in an act of will, we do not notice the passage of our volition into action, and we do not know what muscles we have to move to make our will effective. So what has to be kept in the conception of causality is simply the idea of the regularity of certain successions. ✓ This was already in Hobbes and was to remain after Hume the result of the empiricist analysis of causality. There is no necessity; there is only succession.²

² In explaining the idea of causality as the effect of habit, Hume implicitly acknowledges the validity of the principle of causality, since habit and expectation are the causes of our idea of cause. Hence, the question arises whether he is guilty of a kind of *petitio principii* or whether he wants us to replace intellectual conceptions by less intellectual conceptions. It is in the latter sense that Whitehead has interpreted Hume.

The same conception of causality may be found in the philosophers of the eighteenth century, particularly in D'Alembert and Maupertuis. It assumed even greater importance at the end of the century with the astronomer Laplace and the chemist Lavoisier, who identified the idea of causality with the idea of law and of mathematical function. This theory reached its clearest formulation when Comte in the middle of the nineteenth century asserted that the positivistic mode of thought is characterized by the destruction of the metaphysical idea of cause and the substitution of the idea of law, that is, of relations among phenomena. In the same manner, ✓ Mill defined cause as the constant and unconditioned antecedent of the effect, or as the sum of the positive and negative conditions; ✓ Bain defined cause as the aggregate of conditions; Pearson later defined causality in terms of correlation, and Mach and Russell have identified cause with mathematical function.

Kant's conception of causality is as different from that of Descartes and his followers as it is from the conception of the empiricists. The starting point of Kant's reflections was the problem as it was put by Hume. For Hume was not an ordinary empiricist. He saw in causality something that cannot be explained completely by the observation of the facts. We have already mentioned the solution Hume gave to the problem of causality; but what is still more important for the history of philosophy is his statement of the problem. How does it happen that we join to the idea of an event we call the cause the idea of another event we call the effect? We cannot rationally deduce the idea of the second from the idea of the first, and so the rationalistic conceptions of causality are not tenable; but the ordinary empiricist conceptions are no more tenable, because we cannot observe as a fact the relation of causality between two phenomena, and we see by observation only sequences of phenomena. So there must be something added to experience by the mind. Up to this point Kant was in agreement with Hume. As we have already intimated, the difference between them consists in the solution. According to Hume, our idea of causality, that is, of the necessary connection between successive phenomena, is constituted by a belief, itself founded on a feeling of expectation, which in its turn is founded on custom and memory. For Kant, this solution remains too empirical and does not account for the character of universality and necessity in the judgment of causality in physics.

Accordingly, although there are some formulas of Hume very near those of Kant, there is, nevertheless, an opposition between their conceptions.

Kant, it will be recalled, in considering the problem of the mathematical judgments, concluded from their necessity and universality that there are forms of sensibility: time and space. Now in considering the problem of causality, Kant starts from the propositions of physics. These he finds to be based on causality; and just as the synthetic *a priori* judgments of mathematics have for their condition the forms of sensibility, so the synthetic *a priori* judgments of physics have as their foundation the categories, and particularly the category of causality. Far from being derived from experience, the principle according to which every event has a cause is the foundation of experience. It is thanks to this category that we are able to organize experience. The order in which we organize experience comes from this principle.

What it asserts is that there is a direction in which time passes and that the course of time is irreversible. From the point of view of the Transcendental Analytic, we might even say that time is constituted by the application of the category of causality (whereas from the point of view of the Transcendental Aesthetic, time as a form is prior to causality).

More generally, every category is related to time; and causality, the succession of cause and effect, tells us that there is a regular course of events in time.

Whereas the Cartesian theory of causality tried to do away with time and to make the efficient cause coincide with the formal cause, for Kant, on the contrary, time is quite essential to causality. If one puts something heavy on a couch, although it may seem that the concavity formed is contemporaneous with the act of placement, there is a chronological order between the two facts. Contrary to Descartes, Kant maintains that there is always a distance, small as it may be, between cause and effect.

So once again we see the difference between the rationalism of Kant and the rationalism of Descartes and Leibnitz; and here we may also observe that the result of the theory of Kant would be a definition of causality very near that of the empiricists, except that ¹Kant's conception is justified not by observation, but by the application to experience of a category of the understanding.

Thus, surveying the history of the idea of causality from Aristotle to Kant and Comte, we may say that at first (with Aristotle) there were four causes, then there were (with the classical conceptions of Descartes, Spinoza, and Leibnitz) two causes, the formal and the efficient, united as closely as possible; and then, in a third stage, there remained only one cause, the efficient cause, more rationally founded with Kant, more empirically founded with Comte and the empiricists.

We might even say that in Comte, at least according to his own mode of expression, the idea of cause vanishes to give place to the idea of law.³

And we may now raise the question whether we are not on the way toward a transformation of this idea of law, which is conceived by many modern physicists not as a statement of particular sequences, but only as a statistical result of many nearly unpredictable events.

The history of the philosophical theory of causality is the history of the diminishing of the number of causes, and finally even of the vanishing of the idea of cause.

The nineteenth century witnessed the replacement of the idea of cause by the ideas of law, of necessary conditions, and of functional relation.

Starting from the four Aristotelian causes, then passing through the efficient cause interpreted as formal, the human mind has gone from the acceptance of only the efficient cause to the transformation of the idea of cause into the idea of law and then to the transformation of the classical idea of law into the statistical idea of law, which leaves almost no room for the consideration of particular causes, at least in the elemental, microscopic phenomena.⁴

³ What prepared the way for the replacement of the idea of cause by the idea of law was Newton's discovery of a law, namely, the law of gravitation, in which there was no apparent relation between cause and effect. Indeed, even Descartes' law of the conservation of movement and Leibnitz's law of the conservation of force are not reducible to statements of relations between causes and effects. There are in science many laws that are laws of structure rather than laws of causality.

⁴ One might follow the transformations of the idea of cause in the various conceptions of the relation of God to the world and of the soul to the body. First, a transcendent and final cause was conceived, next, a kind of formal cause, informing things, in Plato and Aristotle, later, an efficient cause, then, occasional causes; and still later, causes conceived as functions.

[2]

There are three questions that, though related, have to be distinguished. the question of the nature, the question of the origin, and the question of the value of the idea of cause. The last two cannot be clearly stated independently of the first. Now the first is very difficult even to state, because we must know at what level of the idea of cause we have to place ourselves in order to study it. For this idea may be conceived at the common-sense level, or even, as we shall see when we study the origin of the idea of cause, at a level lower than that of common sense; or at the philosophical level, to which we have been referring in the preceding pages; or at a higher level, at which the idea of cause may reach a point of such subtilization that it is very near to vanishing altogether. And even when we place ourselves at one of these levels, we must realize that the idea of cause, including in itself many elements, some lower, some higher, is always either a little lower or a little higher than the level at which we have placed ourselves. We must add also that the level at which we place ourselves depends in a certain manner on the answers we give to the questions concerning the origin and the value of the idea of cause, although these answers in their turn depend on the answer to the question of the nature of this idea.

So let us take, rather arbitrarily, since we cannot avoid arbitrariness in this matter, the analysis of the nature of causality in Alexander and Hamelin. Although their points of vantage are somewhat different, they come to rather similar conclusions about the subject.

Hamelin tells us that if we wish to grasp causality in its essential nature, we must not identify cause with the material cause, as Hamilton and Meyerson did. For this would lead to the denial of novelty, since one would always have to find identities. Nor is cause the formal cause, because this identification would also involve the denial of the temporal element in causality. By virtue of these very distinctions, Hamelin is led to the conclusion that the effect is outside the cause with regard to space, quality, and time. We see that such an idea of causality presupposes the disintegration of reality into separate objects or events. When one event simply continues, as a movement continues by virtue of the principle of inertia, there is no cause. The principle of inertia may even be interpreted as asserting that we need to invoke the principle of

causality only when a new event appears. So, according to Hamelin, causality is the necessity for one part of things to be in virtue of what is outside itself. In other words, causality is transitive. We may find nearly the same analysis in Alexander. And we see how these two philosophers agree with Kant on the necessity for a temporal difference between the cause and the effect.

But at the same time that we must take account of these analyses of Hamelin and Alexander, we must realize also that in the idea of causality there is an element of unity between the cause and the effect—an element on which Hegel and the Neo-Hegelian philosopher A. E. Taylor have particularly insisted. When we say that humidity is the cause of rain, we do not mean that there is a difference between humidity and rain, but rather that the same humidity takes the form of rain. Under different appearances we find sameness. As Hegel says, the effect contains nothing but what the cause contains, and *vice versa*. Hamelin and Alexander, although they emphasize the differences, would not deny this element of sameness.⁵

But this identity or sameness always has to be complemented, in its turn, by the differences, the diversity of circumstances, between successive appearances.

So that here again we may observe a kind of play between the one and the many, a kind of dialectics of the mind.

These ideas of sameness and difference are not the only ones that are related to the idea of causality. We might also mention the ideas of relation and negation. We have already quoted Hamelin's definition of cause as the fact without which another fact would not be. Alexander says nearly the same. This element of negation is easily visible in this sense that in order to discover the relations of causality

⁵ According to Hamelin, every part of time is related to every other; and he stresses the fact that the cause does not have to be realized separately from the effect or the effect separately from the cause. Causality is the expression of interrelatedness in time and space. To be sure, this interrelatedness need not be absolute. If everything were completely united with every other thing, we could not discover the relation of causality. In order to discover causes, we have to isolate some series of events from other series of events and to constitute what has been called closed systems. If there is no science among primitive tribes, if the Stoic philosophers developed soothsaying rather than science, this is because they thought that everything is linked to everything else and that—in Hume's formula—anything may produce anything.

we have to use the process of elimination and the method of differences as formulated by Mill in his canons of induction.

After having distinguished these different elements, should we have to add the elements of power and necessity? This depends on the level at which we place ourselves in studying causality. But we may say that at the level we have chosen, particularly according to the indications of Alexander, no notion of power or of necessity is implied in the idea of cause.

In our analysis of the idea of cause, we have tried to consider the efficient cause, as differentiated from the formal cause, with which Descartes tried to unite it, and from the material cause, with which Hamilton and Meyerson have tried to identify it. These two different and even opposite identifications tend to eliminate from the idea of cause the element of time, which seems essential to the idea of causality, and, particularly in the theory of Meyerson, the element of relation. Interpreted thus, positivism, in emphasizing the idea of relations, is, as we have seen, very much nearer the essence of actual science than is Meyerson, who, it seems, pays more attention to the psychology of the scientist than to the result of the scientist's science.

[3]

With regard to the origin of causality, the first question we have to ask ourselves is whether it is legitimate to seek the origin of causality, because it is seeking the cause of causality, the cause of the idea of cause, and we cannot know whether such a quest is legitimate before we have studied the value of the idea of cause; and even when we have studied this problem, the question remains whether a vicious circle is not involved here. But let us assume for the moment that we have the right to seek the origin of this idea.

Bergson has said that causality is felt before it is thought, that this is an experience coextensive with life itself. There are here two ideas that seem equally important: first, that the origin of many of our ideas is in a kind of primary feeling; and secondly, that this primary feeling must be something which is not so peculiar to man as it seems, but is rather a very general feeling immanent, in an obscure way, in the things and beings of nature. These two ideas of Bergson may be found also in Whitehead's insistence on causal efficacy, which is a mode of our apprehension of ourselves in our

acts of will, and in his statement that this feeling is only an expression of that conformity of things with one another which is one of the fundamental elements of the universe.

The first of these ideas, that is, that causality has its origin in ourselves, and in ourselves as feeling beings rather than thinking beings, may be found in Berkeley. According to Berkeley, we apprehend ourselves as beings capable of will and action by means of what he calls a notion, as distinguished from an idea. A notion is what we should today call an intuition; by it the subject sees himself as subject, and he also sees active relations. In fact, when he sees himself, he is conscious of himself as an acting relation. In the same way, Maine de Biran opposes both the rationalists and the empiricists and presents a theory founded on what he calls the primitive fact, that is, the apprehension of ourselves as active.

✓ Probably one of the reasons why the acts of our will are among the most important origins of the idea of causality is that there is apparently a great difference between a thought and an action of our body, and we have seen, in our analysis of the nature of causality, that the difference between cause and effect is something essential.

But there are doubtless still other origins of this idea. For example, it has been said that the idea of cause is related to the idea of accusation. The primitive man accuses some object of being the cause of one or the other of his misfortunes. This feeling of reproach, and accusation is perhaps, as Nietzsche has said, one of the origins of the idea of causality.

Sometimes we ourselves may be made the object of reproach; and we then have feelings of regret and remorse, which are not without influence on the development of the idea of causality.

Moreover, in an act of will we arrange the means in order to accomplish an end. This relation between the means and the end is one of the elements giving rise to the relation between cause and effect. As Aristotle has seen, very often the relation of cause and effect is the relation between means and end, only in reverse order.

Naturally, a philosopher like Hamelin would object to this conception of the origin of the idea of causality. According to him, there is no more causality in ourselves than in the external world. And even more, to seek causality in our mind is to seek it where

causality is not pure; such a quest would lead us only to the causality of common sense. Alexander would agree with Hamelin: our power is an example of causality, but causality is not an effect of power. We should reply to Hamelin and Alexander that since causality is indeed a notion of common sense, there can be no valid objection to a study of causality that would lead only to the statement of a common-sense notion, and that, notwithstanding what they say, it is within himself that man has found the idea of causality, particularly within himself as a feeling being.

To be sure, the consideration of the external world also has a fundamental importance. We have said that if there were no will in ourselves, we should have no feeling of causality; but we must also say that if there were no regular sequences in nature, if there were not a universe with what has been called a fibrous nature, there would be no idea of causality. Some philosophers have said that the regularity in nature is not visible enough to give us the idea of regularity, nevertheless, it seems that man has been able to discover, not by the application of an *a priori* idea, but simply by opening his eyes, that there are regular sequences of events.

Bergson has very well explained how the idea of causality comes from what he calls a kind of endosmosis between man and nature, the observation of man furnishing the idea of power, and the observation of nature furnishing the idea of regularity. If only man existed, the element of regularity would be lacking; if only nature existed, the element of power and efficacy would not be present.

It is true that in our analysis of the nature of causality we have tried not to let this element of power introduce itself; nevertheless, as we have said, when one studies causality, it is very difficult to remain precisely at the level one has chosen, and particularly in seeking the origin of the idea of causality, one has to go a little backwards or toward a lower level.

We are thus in the presence of a notion that may go up or down in the scale of the concepts.

Hence, causality depends very much upon mind. It is related to a return to the past, to the expectation of the future, and to the division and unification of concepts. But it does not depend only on mind, since, as we have seen, we have to take account of the structure of the universe also.

[4]

In our study of the nature of causality (in the second part of this chapter) we placed ourselves on a kind of middle ground between a primordial feeling of causality, which would be dense, opaque, and confused, and a network of very subtle laws. Indeed, a truly philosophical reflection ought to go either toward this opaque feeling or toward the fine and subtle network. But, in order not to wander too far from the common-sense conceptions, we had to remain on the middle ground we have tried to define.

Many philosophers, tending toward the more subtle network, replace causality by laws, functions, and finally zones of probability. Others, such as Maine de Biran, Whitehead, and Claudel in some passages of his *Art Poétique*, tend toward the more dense background.

Here the task of the philosopher is particularly difficult. He has at the same time to maintain and to dissolve causality, to seek what is knowable in it and what is unknowable. On the one hand, he has to be guided by the phenomenological resolution to describe ideas as they present themselves and by the Hegelian dialectics, at least in so far as it is immanent in philosophical reflection, and, on the other, he has to dissociate causality into its two elements of opacity and subtlety.

We have already said that if only objects or only mind existed, causality would not appear, in order to have the idea of causality, we have to be at the point where two worlds meet. Moreover, we have to be at a certain level in our observation of phenomena. It is because separate objects appear to us that we have the idea of causality. If our senses were more refined, perhaps the idea of causality would not have emerged. There would be only a very great number of phenomena, the course of no one of which could be determined in particular. So the idea of causality is true for us because it is true at our level. This does not mean that it is false. It means only and precisely that it is true at our level. And since we are at our level, for us it is true.⁶

⁶ Here we are confronted with the same problem we found when we were concerned with the nature of quality. At our level there are qualities and causality. But we have to realize at the same time that there are other levels where they do not appear to exist, and this is even more obviously true for causality than for qualities. For qualities are perhaps much more objective

It is because we separate phenomena that there is causality. Then we feel the need of uniting what we have separated. Indeed, we may apply to causality, at least to a certain extent, what has already been said of judgment in general; for, as we know from Bradley, in the activity of judgment man separates and unites.

So if we could see things as they are without us, probably we should say that there are no separate causal series—a point on which Nietzsche, Bradley, and the pragmatists have insisted. However, it is questionable whether we can really imagine what the world would be like without us.

At least our presence is necessary in order that qualities appear, and here again we see that causality is rendered possible by the meeting of the outer and the inner worlds, the outer world being the world of quantities, but clothing itself in qualities in the inner world. At least we may for the moment imagine things to be so, for in the last analysis, or rather synthesis, qualities are as fundamental, as objective, as quantities. In other words, the very separation we have drawn between the outer and the inner world has to be finally transcended. Thus, causality belongs to a realm of only half-satisfying concepts.

This does not mean that causality is a concept of no value. The middle ground we have taken, situated as it is between two extremes in which it ultimately resolves itself, has a worth of its own, related to our place in the universe; and so even the analyses of the philosophers whom we have not found very satisfying from a strictly philosophical point of view are nevertheless descriptions of a very valuable part of our experience.

To return once more to the elements that constitute this middle-ground idea of causality, we might say that the element we have called relatively coarser comes from our reflection upon our mind, and that the more subtle element comes from or operates first upon the observation of the external world. But these two things, our mind and the external world, and consequently these two elements of the idea of causality that we have chosen to consider, are not so completely separated as would appear at first sight; so that after

than philosophers have said, although it must be added that these qualities exist in relation to spirit. But is not spirit also something objective? Subjective idealists would deny this, but mind and subjectivity are not identical.

having discovered a dualism in the idea of causality, we may now discover a unity again.

Thus, we have seen that the idea of causality comes from the consideration of phenomena at a certain level—at the human level, where the senses, though they teach us many things, are not very refined, that it is rendered possible by the junction of the outer and the inner worlds; and that, with these two conditions for its origin, it may still tend toward denser or subtler forms.

Yet something remains to be said. Does the idea of causality translate in a satisfactory manner what is given in our experience? Hegel said that the living being cancels cause as cause. I hear a symphony. Shall I say that the cause of my joy and exaltation is the symphony, as if the symphony were there and my joy here? Or if I read a book, shall I say that there is a relation of causality between the small signs on the paper and the emotion that is in me? No, and the less so because, as Eddington says, the physical is not even the cause of the sensation; it is the sensation. More generally, as soon as we are introduced into the realm of the mind, the principle of causality becomes insufficient. Causality remains always on what we might call a historical plane. If we remain on it, we shall not be able to do complete justice to the content, and in seeking for the cause, we shall be in danger of losing the reality, or let us say the essence, of which we seek the cause.

The development of science may lead us to the same conclusion. Perhaps we are on the eve of a revolution as important as that of the sixteenth century, one that founds itself no longer on the idea of isolated systems and observability, but on the idea of the universe and unobservability. The physicists have formulated the principle of indeterminacy, according to which if one determines in a certain manner the course of an electron, from another point of view the course will be indeterminate. The psychoanalysts have formulated the concept of overdetermination, i.e. a multiplicity of causes add themselves to one another when one would have been sufficient. These ideas tend in the same direction as those we have presented. A rationalist like Brunschvicg, tracing the whole history of the idea of causality, ends by saying that the one satisfying formula of the principle of causality is: there is a universe. The whole trend of philosophical thought seems to be in the same direction, and we may trace it from the moment when Hegel criticized causality as

untrue to organism and to spirit: Lotze insisted on the reciprocity of cause and effect, A. E. Taylor on the incompleteness of causality, and Nietzsche on its metaphorical and purely fictitious character. And we have already seen how the theories of Berkeley and Maine de Biran, now reviewed in the light of the foregoing conceptions and after the work of Whitehead, seem to contain a new value.⁷

Whitehead has the great merit of having seen the necessity of substituting a primordial and rude feeling of causality for the idea of causality and also of refining this idea more and more.

In this manner he is able to remain true both to what James called radical empiricism and to the movement of science.

SUPPLEMENT TO CHAPTER VII

Maurice Merleau-Ponty, in his important book *Phénoménologie de la perception* (Paris, 1945), on many points such as causality, things, and space, favors nearly the same conceptions as those I have presented in this work. He starts from Husserl and from the very learned *Gestaltists*. His analyses and his conclusions are ordinarily stated with admirable precision. On most important questions—on consciousness, on the relation between thought and objects and the body, and on language—he points and vindicates the right way of approach. His existentialism unites some of the ideas of Husserl and of Heidegger and the *Gestalt* theory with a characteristic insistence on the ambiguity of existence. Particularly commendable are Chapters III, V, and VI, and the whole of the Second Part. On certain points, particularly in his conception of the *corps propre*, his theory recalls those of Maine de Biran and of the contemporary philosopher Gabriel Marcel, although the ref-

⁷ One might study the difference between cause and occasion (and question the difference). One might mention the distinctions made by Bergson between different types of causality or analyze the question of the plurality of causes, which, according to Alexander, is only apparent. Bergson distinguishes at least two kinds of causality. 'push-button' causality and causality by unrolling. The criticism of causality that A. E. Taylor proposes raises several interesting problems. No event, he says, is completely determined by the preceding events. So the totality of the conditions is never realized. Cause is, as Hegel had well seen, an incomplete ground. Moreover, how can we distinguish what is indispensable from what is merely accessory? This is a useful distinction, but quite artificial.

erences to them are rather rare in the book. Merleau-Ponty frequently criticizes the ideas of Bergson in a manner that might raise the question whether he sees them in their full depth and dynamism. Although this might be ascribed to the use Bergson makes of certain comparisons, it is for the most part the result of a necessary (i.e. historically necessary) eclipse of a great philosopher's ideas after their first period of brilliance. Nevertheless, this volume certainly represents a very remarkable achievement and a kind of landmark for new modes of thought.

WHAT appears first in the history of man, if we consider it from the point of view of the problem of freedom and necessity, is the idea of necessity or fate, which dominates Greek tragedy. But we may ask ourselves whether this idea of necessity does not presuppose the idea of freedom. How could man feel as an obstacle the destiny that hangs over him if he did not also feel in himself a desire for freedom and even freedom itself? Yet, according to the Greek tragic poets, the actions that appear to be the product of the human will are really determined by a divine power.

This is fatalism rather than determinism. For the fatalist, there is a universal cause that fulfils its own will independently of man. For the determinist, on the other hand, every human action is determined by particular events. These events may be physiological or psychological. The determinist may base his affirmation on considerations drawn from physics, such as the law of the conservation of energy, or from physiology, such as the principle that nothing in man is susceptible of explanation except in terms of external data, or from economics, as Karl Marx did, or from ideology, as Auguste Comte did when he said that the world is controlled by ideas. But, as Bergson has said, every form of determinism has to found itself ultimately on psychological determinism, unless the determinist adopts the theory of epiphenomenalism and says that psychical phenomena have no influence whatever on physical phenomena.

Hence it seems rather useless to discuss the different varieties of determinism other than psychological determinism, their arguments have been very well criticized, particularly by Boutroux, James Ward, and Bergson. Determinism presupposes the applicability of scientific results to the whole of the universe and does not take into

account the presuppositions the scientist himself has to make in order to state his laws. Accordingly, it is unnecessary, as well as somewhat questionable, in order to preserve freedom, to have recourse to the more recent discoveries of physics and to revive the doctrine of Epicurus and Lucretius, who compared the movements of the human will to those of the atoms.

Thus, all that remains to be discussed is psychological determinism, as presented, for example, in Hobbes, Mill, Taine, and Spencer. However, this discussion will be postponed a little until after the meaning of freedom has first been considered.

We may say that there is a whole scale of possible definitions and concepts of freedom, from freedom considered as determination in agreement with reason to freedom conceived as pure chance. The Socratic and Stoic conception is at one extreme and the Epicurean conception at the other. And freedom will have to be found probably not in one of these two extremes, but somewhere between them, or somewhere outside the scale, which we shall now try to describe.

According to Socrates, virtue is knowledge. This means that vice is ignorance, that if one could see clearly what one ought to do, one would necessarily do it; for such is the force of the idea of the good that we cannot know it without acting in agreement with it. This was also the theory of Plato, at least in his first dialogues; for in the *Republic* we find the affirmation that man chooses his own destiny. It is only by taking upon himself the responsibility for his faults that man absolves God.

We find in the Stoics, in Spinoza, and in Hegel the same conception of the identity of freedom with complete self-determination by reason.

It can readily be seen that such a theory of freedom may be called in reality a denial of freedom.

If, then, we place ourselves at the other extreme, we shall have the theory of the Epicureans, according to whom freedom is like the swerving of the atoms, at quite uncertain places and moments, from the straight line along which they are supposed to fall in the infinite void. As we can easily see, this would be pure chance. We might compare it to the so-called freedom of indifference with which one decides, quite without motive, between two actions. But this conception of freedom, which was maintained in some quarters during the Middle Ages, and of which traces may be found in

Bossuet, is evidently unsatisfactory, for it is only with regard to actions of small importance that we seem to decide in this way, and even then we can always find some motives for one action rather than the other. We might also compare these theories to that of Renouvier, according to whom man may begin some series of acts without any predetermining conditions. But Renouvier's theory presupposes a discontinuity in time, which may be questioned.

Clearly, the Epicurean theory of freedom, as well as that of all the philosophies that follow the same line, is ultimately a theory of chance. Indeed, it is in the Atomistic philosophies that we find the first affirmations of chance. Lucretius emphasizes the indeterminacy of the moments and places in which the atoms swerve from their courses in order to meet.

But the Atomists never achieved a precise analysis of the concept of chance. Perhaps the affirmation of chance precludes an analysis of chance, and an analysis of chance precludes the affirmation of it.

Two of the most remarkable analyses of chance may be found in Aristotle and in Cournot. We shall not insist on some of the distinctions which Aristotle makes on this point, but rather on the fact that he defines chance proper as a product of purely mechanical causes, though having all the appearance of a product of deliberation and will. We speak of chance, of good or bad luck, if something happens that, although it seems deliberate, is purely the effect of efficient causes without any admixture of finality. Cournot resorts to the idea that chance is the meeting of two independent series of causes; each one of the series is determined, and the meeting itself is determined, but its qualitative aspect is something new which supervenes upon the two series. So if I meet somebody in the street, my walk and his walk are both determined, and consequently the meeting is also determined, nevertheless, the fact that the meeting happens is qualitatively something new.

The theory of probability had an influence on the development of the theory of chance in the nineteenth century. We should have to go back to Pascal and Leibnitz and their friends and disciples to see the origin of this theory. But its influence was felt only in the middle and at the end of the nineteenth century. Certain scientists concluded that the laws we discover in nature are produced only by the compensations of a very great number of movements of particles without any law. We find this idea in Poincaré

and also in the philosophy of Boutroux. In the more recent developments of physical science we might find conceptions very similar to these, which would ultimately present the order of nature as the result of many conflicting and compensating disorders.

Nearly at the same time as Boutroux advanced his theories, the American philosopher Peirce founded a system which he called by several names, one being Tychism. By this he meant that at the bottom of things there is an element of chance. This theory was also presented, though in another form, by Blood, and finally by James, who contended that freedom would not be possible in a universe without an element or realm of chance.

As we have already suggested, chance can only be affirmed. If it is analyzed, it disappears. To explain it is to explain it away. So we have to choose between an affirmation of chance and an analysis of chance.

After having seen these two theories of freedom, with the Stoics at one extreme and the Epicureans at the other, let us briefly consider three philosophers who have formulated conceptions in which we may find different irreducible elements—Descartes, Leibnitz, and Kant.¹

Descartes is particularly interesting on this point, first, because he affirms very strongly the identity of will and freedom, and secondly, because there are passages in his writings in which he emphasizes the complete indeterminacy of freedom as well as

¹ We might choose Voltaire as an example of a philosopher who vacillated in his opinions about freedom. Sometimes he affirmed freedom—a limited and variable freedom whose highest degree was (in agreement with the teachings of Descartes and Leibnitz) the necessary but gracious obedience to the orders of reason. Voltaire said that freedom understood in this sense is 'the health of life.' Moreover, he affirmed that whatever system we embrace, we always act as if we were free.

But in the end he seems to have denied freedom. Our actions are free, according to him, but our will is not free. He went even further and presented more and more deterministic formulas. 'It is contradictory that whatever has to be may not come to pass.' 'The doctrine contrary to the doctrine of necessity is absurd.' Then freedom appeared to him only as the known effect of an unknown cause. From this point of view, he felt himself constrained to write what he wrote, though he knew too that the judge who was to condemn him was constrained to condemn him. This did not prevent Voltaire from thinking that he was right and the judge wrong; nor did it prevent him from affirming the value of political freedom and tolerance. In many philosophers of the eighteenth century we find at the same time the denial of metaphysical and psychological freedom and the affirmation of political freedom.

passages in which, in the Socratic and Stoic manner, he identifies freedom and determination by reason. He himself was fully aware of the different meanings he gave to the term 'freedom' and saw clearly that there is a scale of meanings going from the freedom of indifference, which, according to him, is in man the lowest form of freedom, to that free action which arises from what he calls a great light in the understanding. We have to notice also that what is the lowest form of freedom for man is not in itself the lowest form of freedom, for God determines Himself without any motives, without paying any attention to the eternal truths, because He is Himself the free originator of these truths and cannot be dominated in any manner by them.

Leibnitz, chiefly in an effort to escape the pantheism and determinism of Spinoza, defines freedom as the spontaneity of an intelligent being. The motives, he says, incline without constraining. But it seems that all his efforts were in vain: according to his monadology, everything that happens in a monad is determined by the past of the monad, and, according to his logical principles, everything that happens to the subject is comprehended in the concept of the subject. Such a doctrine leaves no great hope for the possibility of freedom.

As for Kant, his solution reminds us very strongly, at least in part, of the solution provided by Plato in the *Republic*. According to Kant, from the scientific point of view, all our actions are determined. But, as we already know, for him, time as well as space is nothing that exists in the things-in-themselves, time is a form brought by our understanding in order to organize experience. The voice of duty we hear in ourselves tells us that we are free; for its discourse is addressed to a being who can either obey or disobey. Now we know that the things-in-themselves are outside time; and each one of us is a thing-in-itself. So there are no determining motives for any one of our actions in so far as it is the action of a thing-in-itself. The truth is, according to Kant, that our present action is not determined by our past actions, but that our present action as well as our past actions is the reflection, we might say the echo, the reverberation, of the one action by which we constitute our being outside time, the action by which we choose our being in an atemporal, undetermined choice. Thus, we see how Kant, having left to determinism the world of phenomena, keeps freedom for the

world of things-in-themselves. So the action of a criminal, for example, is only in appearance explained by his preceding acts, by his environment, and by his education; it has its real explanation in the one act by which he chose his intelligible character.

One can easily see the deficiencies of such a theory, notwithstanding its very high interest. How can one explain the changes in the human personality and the fact of conversion? One must have recourse to the idea, advanced by some mystics, of changes during eternity. But the most important objection is that we can never have the experience of freedom in our lives; it is rather an inferred conclusion, valuable only for our eternal life, which is unknown to us.

Therefore, no one of these three theories is completely satisfying: Leibnitz excludes in practice the freedom he affirms in theory; Kant ? does not give us freedom in this world; and Descartes conceives as the highest freedom absolute determination by the light of reason. Each of these theories, nevertheless, has some important elements, is a description of a part of the facts; and the theory of Kant may even be conceived as a symbol of a real fact in our experience, of our identity with ourselves, unknown to us, and underlying every one of our acts. But the richest of these theories seems to be that of Descartes. We have already alluded to the various meanings of freedom in Descartes. Between the two extreme meanings that we have emphasized there is a nearly continuous gradation of meanings. For example, there is the disposition to act and there is the self-command, so characteristic of the heroes of the poet Corneille, a contemporary of Descartes.

The distinction Kant made between phenomena and noumena (things-in-themselves) could not be maintained by his successors. We may mention two of them in particular and contrast their doctrines: Hegel, for whom everything has to be subsumed under the Idea, the one thing in itself and for itself, and Renouvier, who may be called a phenomenalist in that he denied the idea of noumena. The oppositions between these two philosophers may be seen in the way in which they deal with the antinomies; for while Hegel says that the world may be considered as both finite and infinite (each one of these aspects being only a view of a reality which in the last analysis, or rather synthesis, is infinite), Renouvier denies the value of the idea of infinity. It is only if we are in a world of

finite persons that freedom is possible, that we can perform acts that are really beginnings of new series

Another thinker whose theory we mention because it shows the predicament in which Kant's theory placed philosophers is Fouillée. Freedom is what he calls an *idée force*. This means that freedom is not a reality, but may become one if we believe in it; it is a source of action springing from our will for liberty.

It can be readily understood that many minds could not be satisfied either by the rational development conceived by Hegel, or by those discontinuous manifestations of freedom affirmed by Renouvier, or by Fouillée's substitution of the will for freedom for what they felt to be the fact of freedom. This is the reason why in the second quarter of the nineteenth century—in England with James Ward and in France with Boutroux—there came an insistence on the contingency of the laws of nature, and even of the laws of logic, and consequently on the possibility of free actions in man. Bergson went farther in the criticism both of the ordinary theories of freedom and of determinism. His observation of mental life led him to reject the view of Renouvier, who was a believer in discontinuity. Nor did Bergson think that the Hegelian conception corresponds to reality. Above all, Bergson found that the reason why Kant had reserved freedom for the world of things-in-themselves and banished it from the world of phenomena was that he had not taken account of the profound reality of time. For time is not a form of the understanding, as conceptual space is, and to conceive freedom as outside time, as Kant did, is not to conceive freedom, but to destroy freedom altogether. If freedom is to be found at all, it is in our temporal life. And, according to Bergson, it is because this life is essentially time, concrete time—which he calls duration—that we are free.

It was on the basis of this affirmation that Bergson criticized the determinists like Taine, Mill, and Spencer. We have said that every form of determinism is founded on psychological determinism. Now psychological determinism is in its turn ultimately founded on associationism. According to this doctrine, our mental life is a succession of moments every one of which is the effect of the preceding ones and a cause of the following ones. Moreover, at each one of these moments the mind may be analyzed into different motives; so that, ultimately, if we knew the motives at any one

moment of our life, we could predict all the following actions, because it is always the strongest motive that prevails.

This whole conception was challenged by Bergson's affirmation of time, which had already made him quite unsympathetic to the Kantian theory. Let us observe first that if I say that the strongest motive prevails—for example, if I say that the desire to take a walk prevails at a certain moment over the desire to work because the former is stronger than the latter—how can I know that it was really the stronger motive? Only because it has prevailed. I know its strength only by its effect, so that to say that the strongest motive has prevailed means nothing but that the motive that has prevailed has prevailed. But we may go farther. Is this analysis of our mental life into separate moments, is even the analysis of each of these separate moments into different ideas and motives, faithful to reality? There is no such thing as a moment separate from other moments or an idea separated from other ideas in our mind. Here everything is one; and there are no moments, but only the flux of duration. So once again the fact of real time allows us to affirm freedom.

The determinists would say that, nevertheless, if we knew all the motives, we could predict the action. But how can I know with sufficient intimacy the motives that are in the mind of another? The less so because these motives are tinged with the whole personality of the man and in fact, as we have said, are not separated from other motives; so that there would be only one means of knowing his motives: to place myself inside his mind, to be the man himself. Yet even he himself does not know what will be the action he is going to perform. He deliberates about it. Thus, neither by being outside ourselves nor by being inside ourselves can we know what action will be performed.

In other words, the future is unpredictable; and the whole mistake of determinism is to conceive the future on the model of the past. If we look backward and see our past actions retrospectively, all appears as determined. But if we look forward, or as James says, prospectively, there is before us only the complete indeterminacy of the future.

It is true that we try to conceal from ourselves this complete indeterminacy by saying that at one moment, for example, there are two possible actions between which we hesitate. But this idea

of possibility is questionable; it is also a way of projecting the past into the future. It is only after we have acted, at least in the most important decisions, that we may say, retrospectively, that two solutions were possible. A choice between possibilities is characteristic of rather unimportant decisions, in which we contemplate the possibilities before acting, but in the really important decisions we create the possibility by our action—indeed, we create ourselves by our action.

The most important element in the theory of Bergson is this affirmation of the future as unpredictable—what has been called the openness of the future. Aristotle emphasized a similar point on logical grounds when he said that there are neither true nor false affirmations about the future. For example, if I say that there will be a naval battle tomorrow, this statement now is neither true nor false, because the battle depends on the will of the admiral, who has not yet made his decision. Hence, judgments about the future are neither true nor false. But Bergson goes a little farther, for he says not only that such judgments are neither true nor false, but that there can be no certain judgment, and even no judgment at all, about the future, and that every judgment we make about it transforms it into the past and therefore denies it.

This permits us, it is true, to say of human freedom only that it is impossible to talk about it. In fact, this is one of the conclusions of Bergson. If we try to prove freedom conceptually, we deny it. Thus, freedom is denied by its defenders as well as by its adversaries.

Nevertheless, Bergson gives some definitions of freedom. For example, he says that an act is free when its relation to myself is like the relation of a work of art to its author or when it ripens in me like a fruit. In other words, he emphasizes the continuity of our mental life. But here a question may be raised—almost the same question, in fact, as the one we have already raised about Leibnitz's conception of freedom. This ripening of action, this maturation, even what Bergson calls the creation of our selves by ourselves, may be understood as a kind of determination, one might say that Bergson proves one of his affirmations even more than he wanted to prove it, since his own definitions of freedom tend to make the idea of freedom vanish.

In fact, starting from Bergson, we might formulate a theory that would deny both freedom and determinism; or, if it left freedom,

this would be a freedom impossible to define or even to conceive.

The merit of Bergson has been to refute associationism very convincingly, to make us realize that the quality of our acts that is called freedom can only be felt from the inside and not contemplated from the outside, and that it is a quality essentially related to time, to that dimension of time which is the future.

We must also mention William James, who, interested since his youth in the problem of freedom, at first saw the solution in Renouvier, then later in Bergson, and finally tried to reconcile these two philosophers by speaking of blocks of duration, discontinuous with one another in the manner of Renouvier, but having a continuity in themselves, in the manner of Bergson.

The most influential of recent philosophers as regards the problem of freedom are probably those who have their starting point in the thought of Kierkegaard. He insisted on the reality of possibility. According to him, it is a deficiency of the Hegelian universe that it is deprived of possibility. Naturally, a man who lives only in possibilities would be on what Kierkegaard would call an inferior level of existence, but a man deprived of the idea of possibility would be at a still lower level.

Freedom is necessary for Kierkegaard in order that both moral and religious action have their whole meaning. The concept of sin implies a free choice between possibilities, and the attraction, in anxiety, of the evil possibility. As for religious action, although it is under the power of God, it is the meeting point of our finite will and the will of God.

Heidegger has emphasized that freedom is related to the nature of man as the being who is always in relation to the future, always ahead of himself, as it were. Human existence is this self-projection.

So in Heidegger as well as in Bergson we see the link between freedom and time, but we see also that we can say very little about freedom, except that it is the openness of the future as opposed to the closed past. One of the difficulties of the subject would be that if we follow the indications of Bergson, the idea of possibility seems to vanish, and we must ask ourselves whether the idea of freedom would not vanish precisely because the idea of the possible has been destroyed. We should be left with a conception that would deny both freedom and necessity, and we should have to place

ourselves outside the dilemma that has so long impeded philosophical thought.

The intellectual affirmation of freedom is essentially a negation—a negation of necessity. But what is necessity? It is in its turn a negation—the negation of possibility. The necessary is what cannot not be, as Aristotle has said. And what is the possible? The possible, at least the possible as theoretically conceived, is in its turn a negative idea. The concept of possibility implies that in a particular case what has taken place 'might not have taken place.' But this negation is founded on a hypothesis. For how do we know that what has been might not have been? What has been might not have been *if* . . . if we cancel one or some of the conditions that have made what has happened happen, or which will make happen what will happen.

Ignorance very often performs this act of canceling. Or if not ignorance, abstraction. But to abstract is to ignore, to ignore is to abstract.

These reflections are not different from those of some Megarian and Stoic philosophers and may be found also in Spinoza or Bergson. Their conclusion would be that there is neither outside the mind nor even in the mind—in so far as the mind tends to think objectively—a category of modality that could be called necessity. For if we were to succeed in completely eliminating the thought of possibility, the negation of this thought would have no meaning.

Let us notice also that necessity, at least when it does not apply to first principles, is as hypothetical as possibility, like possibility, it presupposes an 'if.' If something exists, another thing exists.

There would remain only one category of modality: reality. Or we might say more accurately. since there is only one kind of modality, there is no modality at all.

Thus, there are only judgments of reality, but sometimes the human mind feels constrained (it is very hard to expound this theory itself without introducing the different modalities we have banished) to underline or accent reality by calling it necessity or to envelop it in the mist of possibilities.

What are the consequences for the concept of freedom? Freedom is the conceived negation of the conceived negation of a conceived negation. If, therefore, we really eliminate the last negation (possibility), the second (necessity) is thereby canceled, and so is the first.

Thus, the last card of this house of cards, freedom, or rather the concept of freedom, vanishes

One foresees 'possible' objections to such a thesis: objections from the Kantian point of view, according to which the categories of modality are only subjective, and in that case what we have said here would be nothing new, and from the point of view of those who contend that there are objective possibilities that can be asserted as existing in the nature of things. Doubtless the proposed thesis is not altogether convincing. But perhaps this is because it belongs to the nature of man that he is not persuaded by such reasoning and that he needs to construct those fictitious edifices, the possibilities man superimposes upon the real, which he sets before and after the real as its source and its negation, and which he then negates and then affirms again.

This does not mean that man does not have a positive feeling of the possible (just as there is probably a positive feeling of necessity). He has such a feeling because the future exists as future and therefore differs from the present not only in respect to the truth or falsity of judgments about each, as Aristotle observed, but also in respect to structure, as Bergson has seen. But it is a sophism, a sophism of retrospection and abstraction, as Bergson too has said, to transform the living, felt future—the organic future, to use the word of Jankelevitch—into a concept.

In other words, freedom is a problem in the etymological sense of the word—not a theoretical problem, but something we 'throw forward,' in advance of us; and it is a hypothesis, also in the etymological and not in the ordinary sense, i.e. a springboard for our *élan*. But being both hypothesis and problem, it can never be thesis, theory, contemplation. The free act cannot be thought about. It is simply an act. We cannot even say that it is free. Perhaps we cannot even say that it is an act. We act it.²

We have found that the problem of freedom is related to the more general problem of modality, and for this last problem we have found a solution, though perhaps a too simple one. For not only is it essential to human nature to divide things at every moment into the possible, the necessary, and the real, but, human nature being related to nature in general, there must be possible, necessary,

² This too is very near the reflections of Bergson.

and real aspects even in nature broadly conceived, although for their manifestations they need the presence of man.

Let us, then, revert to the concept of freedom and see once more how we can define it, taking into consideration at the same time the fact that no definition can do justice to its specific nature.

In fact, as we have seen, not only what we have called the Stoic definition of freedom as determination by reason, but also the Leibnitzian and the Bergsonian definitions destroy in a certain manner the possibility and the reality of freedom. We have reached the conclusion that freedom is an undefinable act. Nevertheless, remembering some ideas expressed particularly by Nietzsche and Kierkegaard and also by Ibsen, we may say that the free act is the one by which we assume the responsibility for our action and its consequences, as expressive of our most profound and real self.³ In this sense we may say that the free act is the act that we cannot not do. And here again we find the insufficiency of the categories, since the free act, which seemed to presuppose possibility, is related to necessity.⁴

But we cannot stop here either. We have to deny the relation of freedom to both these categories of modality, in order to keep it related only to reality.

We must add that sometimes the act of freedom is something quite new—something like the beginning of a new series as it was described by Renouvier. But this does not contradict what we have said, for, at least from an objective point of view, this new series is still the continuation of something that was in us, but hidden, under the old series. It might be objected that in resorting to this explanation, we fall prey to the objective mode of thinking we have criticized. And this is true in one sense. True freedom can only be experienced from within. And at that last moment, when the free act is performing itself, as it were, in us, every explanation and every word has to stop. We are beyond the sphere of intellectual problems. It is only afterward and retrospectively that we shall be able to formulate and to justify our freedom.

³ It has been said that 'freedom is but wholeness'. In fact, our whole personality centers itself around the free act.

⁴ James noticed that many of the greatest men of action—Mahomet and Napoleon, for example—have been fatalists. Napoleon believed in his star.

THE very order of our chapters may be sufficient to show what side we should take, and indeed have taken, on the question whether the theory of reality or the theory of knowledge must come first. We have implied that the theory of reality must precede the theory of knowledge. Many philosophers, particularly since Kant, would think otherwise. They would contend that one must study the instrument, that is, human reason, before one uses it. One needs to know the limits, the value, the criterion of knowledge, before formulating the theory of reality. In fact, however, in the great philosophers the theory of knowledge and the theory of reality are closely connected. Although Descartes, for example, in his *Rules for the Direction of the Mind*, presents his philosophy as the consequence of his method, we cannot say the same for the *Discourse on Method* or the *Meditations*; for in these works the method of Descartes is founded on the *cogito ergo sum*, which is the first step in his theory of reality. As for the Ideas of Plato, they belong to the theory of reality as well as to the theory of knowledge. Even Kant's theory of knowledge depends on his distinction between appearances and things-in-themselves, which is a theory about reality. So, if the partisans of the priority of the theory of knowledge maintain that every one of our affirmations about reality implies some affirmations about knowledge, we should reply that every affirmation about knowledge implies affirmations about reality. The one difference is that those who study the theories of knowledge, the epistemologists, are not so explicit in their presuppositions or are not so conscious of them, while those who study the theory of reality know very well that some presuppositions of method are implied in the course of their reflections. Moreover, it would seem that the natural attitude

of the human mind is to look at reality; it is by a kind of indirect action, or we might say, borrowing an expression of Plato but applying it in another manner, it is by a kind of obliquity of vision that we draw our attention away from reality to focus it upon our way of seeing reality. Finally, this distinction, of which modern, or rather contemporary, philosophy is so proud, would appear to be rather futile.

The philosophical tradition that assigns priority to the theory of knowledge goes back to Kant. To be sure, Locke and Hume had been primarily interested in the theory of knowledge. But it was only when the problems they had studied from the point of view of empiricism were considered by Kant from the point of view of rationalism that the theory of knowledge was constituted.

As we have already implied, one might distinguish between the question of the limits of knowledge, the question of its value, the question of its criterion, and the question of its origin. But all these questions are very closely related to one another, so that it is nearly impossible to study each one separately.

Let us first consider the question of the limits of knowledge.

The term 'skepticism' comes from a Greek word that means to seek, to consider in order to discover. However, 'skepticism' has come to designate the theory of the man who seeks truth but finds no truth. In this sense we might say that skepticism is not a theory of knowledge, it is rather a theory of no knowledge. Nevertheless, by referring to it, we may understand the position of dogmatism against which it struggles, and of relativism, which, having observed this struggle between dogmatism and skepticism, concludes that both have a wrong idea of truth.

We might find seeds of skepticism already in Xenophanes. But it was particularly under the influence of the Eleatics on the one hand and of the Heracliteans on the other that skepticism developed. The Greek Sophists were skeptics, whether they drew their skeptical conclusions as a consequence of the philosophy of universal rest or of the philosophy of universal movement.

Socrates was a skeptic only in the sense that he sought truth. It is this meaning that we have to attribute to the sentence, 'I know nothing, and this is all I know.' Nevertheless, an element of skepticism in the ordinary sense of the word was probably present in

Socrates and, to a lesser extent, in Plato, as P. E. More has shown, and it appeared more clearly in the philosophers of the New Academy. The New Academy represented an effort to return from the disciples of Plato to the less dogmatic Plato and to his master Socrates. The philosophers of the New Academy disputed against the Stoics, showing that evidence is never perfect and that we can attain only a more reasonable, a probable judgment.

It was with Pyrrho, Aenesidemus, and Sextus Empiricus that /skepticism reached full development.

There seems to be a relation between Pyrrho and certain Megarian disciples of Socrates who said that judgment is impossible. They denied that a predicate can be attributed to a subject—which is precisely the function of judgment.

Skepticism fought against both the belief in the senses and the belief in reason, which, according to this doctrine, is founded on undemonstrable principles. From the oppositions between judgments the skeptics showed the relativity of everything.

Pyrrho concluded that since neither our sensations nor our judgments are veridical, everything is indifferent. He arrived at a suspension of judgment. One may act, but without attributing any importance to the act.

Skepticism appears again and again in the history of thought. We might take as examples Montaigne in the sixteenth century, Hume in the eighteenth, Renan and Anatole France in the nineteenth. But are they really skeptics? There is a certain faith in Nature and also a faith in religion in Montaigne, there is again a faith in Nature in Hume, and a faith in the human mind in Renan and France.

Even if we admit that there is no absolute truth, there are partial truths, there are judgments that are truer than the contrary judgments. It is in this sense that the philosophers of the New Academy admitted that there are things reasonable and probable. But we may go a little farther. Although man is a questioning being, he is also by nature an answering being. Indeed, we may go still farther and say that we have an immediate relation to reality.

We must also observe that skepticism is very often taken as an argument in favor of custom or tradition or religion. It is in this manner that Pascal makes use of Montaigne. But one may question the validity of such an argument, which tends to replace some

affirmations by others. Kant has said in one passage that he destroyed knowledge in order to make place for belief, but the belief that he proposes is for him a rational belief, an expression of the practical reason.

Finally, let us notice that there is a doubt that is not a skeptical doubt. Descartes contended that his was not the doubt of the skeptics, rather, he raised it in order that he might reach certainty. After having summarized all the arguments one can give against any form of certainty (against the certainty of the senses, since there are so many illusions and since I am perfectly assured of the truth of what I see when I am dreaming; and even against the certainty of mathematical reasoning, for it presupposes memory and so a constancy in the universe that had not been proved in his system up to that point), he said that one certainty emerged from his doubt: to doubt is to think, and if I think, I am. Thus, he passed from a provisional skepticism to a definitive dogmatism.

After considering skepticism, let us briefly examine agnosticism and see first how it is related to skepticism.

There are different philosophies that may be called philosophies of the unknowable. Some of them might be called philosophies of the complete unknowable. Such is the doctrine of Gorgias, who said that if something exists (which he doubted), it cannot be known. The different forms of skepticism could also be called philosophies of the complete unknowable. On the other hand, there are doctrines that oppose one part of reality, which is called the phenomenal or the relative, to another part of reality, which is the noumenal or intelligible realm or the Absolute, and which is unknowable. Such are the doctrines of Kant and Spencer. Finally, there are doctrines that oppose the highest reality, or the highest point in reality, to every other thing because this highest point has such an overflowing richness and brightness that it baffles and dazzles us. This is negative theology as it is presented by Dionysius the Areopagite, the Christian mystics, and Scotus Erigena. It is in a tradition that may be traced back to certain passages of Plato and some of the Neo-Platonic commentators such as Proclus and Damascius.

Leaving aside the first doctrine, we may say that the second presupposes a questionable dichotomy between the completely knowable and the completely unknowable, and we may also notice that the latter is not so utterly unknowable, at least for Kant, as it

would appear at first, since it is accessible to the practical reason. As for the last doctrine, it is a mode of expressing the inexhaustibility of the highest principle, and in this sense the affirmation of the unknowable is legitimate.

Yet the mystics would admit that the highest principle, if it is not accessible to ordinary reason, is nevertheless apprehended by a kind of obscure knowledge or intuition, and in this sense the unknowable is known and the invisible is seen.

Hence, we can reach a doctrine that we might formulate by saying that the highest aspects, not only of the first principle but of everything, are apprehended by this unknowing knowledge or 'learned ignorance.'

To skepticism and agnosticism are opposed the dogmatic theories of knowledge, and of these we may distinguish two kinds: the rationalistic and the empiricist.

Let us consider first the rationalists, i.e. those who take the side of reason. *Logos* in Greek means both reasoning and a word uttered. Apparently the Greeks did not at first distinguish between language and thought. Thought is still defined in Plato as the conversation of the soul with itself. But from this very fact we see that Plato was aware of some distinction between the spoken word and thought.

The *Logos* of Heraclitus seems to be very far from what we should call reason, for it baffles ordinary reason. Nevertheless, what we hear when Heraclitus speaks is the voice of reason in opposition to sensation and to pure facts. For him, eyes are better than ears, but certainly the *Logos* (which may be translated as 'discourse,' 'language,' 'word,' or 'thought') is still better. Ordinary men sleep, they are encompassed in their private worlds. But the wise man knows what is coming; reason in him communicates with reason in the universe. Moreover, this wisdom is one thing, separate from all other things (which are themselves not separated from one another) and governing them all.

The Eleatic philosophers, the adversaries of Heraclitus, were even more diffident toward the senses than he was. For them there is but one thing, the perfect, rounded whole which at the same time thinks and is thought (and the identity of thinking and thought was to have great importance in the course of the history of idealism), all the rest is appearance and illusion.

Plato can be said to be in two respects the successor of the Eleatics: in his emphasis on argument (reason), and in his idea that reason attains the immutable. According to him, the nature of reason can be shown most easily in mathematics. Here Plato combined the teaching of the Pythagoreans with that of the Eleatics and advised the philosopher to be a mathematician.¹

For it was not only with language that reason was at first identified, it was also identified with mathematical calculations. We see this in the Latin word *ratio* as well as in the Greek word *logos*.

Little by little a distinction developed between intelligence, or understanding, and reason. A curious change occurred in the use of these words. In the Middle Ages reason was the faculty of reasoning, of passing from premises to conclusions, while intelligence was the faculty of apprehending the different terms at once and was very near intuition. With Kant the meanings were reversed. Understanding, according to Kant's usage, or intelligence, which is ordinarily considered as the synonym of understanding, is the faculty of reasoning. It makes use of those concepts which Kant called categories, passing from the conditioned to the condition in a never-ending process, whereas reason is the highest mental faculty, by which we unify ideas as much as possible, and by which we pass—without much success, at least if we remain inside the limits of the theoretical reason—to the metaphysical ideas of the world, the soul, and God.

The whole evolution of German philosophy after Kant may be said to be the attempt of reason to triumph over understanding and to revise the Kantian conception in order to show that we can take hold of metaphysical realities by the use of reason. For Hegel, reason is essentially the faculty of the whole, whereas understanding, remaining always in the realm of parts and conditions, can never give us complete satisfaction and is a form of what he once called the Unhappy Consciousness. Only reason attains happiness.

On the other hand, Renouvier sided with the understanding and assailed the Hegelian reason as not in agreement with the principle of contradiction.

¹ We omit Aristotle from our consideration for the moment. He had a theory of a separate reason, the *nous poietikos*, and a theory of a reason applied to things. We also pass over the Stoics and later the Neo-Platonists, who reiterate in a sense a part of the theory of Heraclitus.

Thus, we may observe a reversal in the meanings of these terms from the Middle Ages to Kant and his successors. In the seventeenth century, between these two periods, reason was conceived by Descartes and his contemporaries as the synonym of *bon sens*. The two terms were interchangeable, and Boileau represented false reasoning as the foe of reason.

So far we have been concerned only with the changes and reversals that have taken place in the meaning of the term 'reason.' Let us now consider the theories of the rationalists, who may be regarded as the dogmatists of reason.

The first great dogmatist of reason was Parmenides. As we have observed, according to him, Being and the thought of Being are the same. And all that is not Being is Not-Being, that is, appearance. It is evident that this theory is founded on the concept of unity. According to Parmenides, to say and to think are the same, and we can think only existing things. Hence, whatever can be thought and spoken of, is. With these words Parmenides laid the foundation of every form of rationalism. Truth, Being, thought are conceived as identical and as completely effable. We might follow this conception from him to Descartes and Spinoza and even to Hegel.

Other Pre-Socratic philosophers replaced this idea of unity by the idea of likeness, an idea notable in Anaxagoras and in the Hippocratic writings: like knows like. This is a formula that has had much influence in the course of the development of the theories of knowledge.

Pythagoreanism, on the other hand, made a great contribution to the development of rationalism when it asserted that the real things are numbers.

Thus, the unity and aloofness of the Heracleitean *Logos*, the belief of Parmenides in thought and unity, the Pythagorean belief in numbers—all these themes are fundamental in rationalism, and we find them united in Plato.

Plato's theory of knowledge, which is a consequence of Socrates' affirmation of the objective validity of concepts, was also influenced by the idea that like knows like. For example, the soul knows the Ideas because it is very much akin to them. And it is akin to the Ideas because it is simple. So we find here a unification of the theory of Parmenides and the theories of Anaxagoras.

Plato started from the affirmation of Socrates that virtue is one

and that virtue is science. In his first dialogues he showed that we cannot define any particular virtue unless we first define the good. And the knowledge of the good is at the same time virtue and wisdom. All these dialogues imply that the Sophists were wrong when they destroyed the idea of realities independent of man. This controversy with the Sophists was summarized and completed in the *Theaetetus*, in which Plato showed that science is quite different from sensation because sensation is always relative. Very early, in the *Charmides*, he had clearly maintained that there is no knowledge if there is not something known; knowledge is always knowledge of something. With this formula Plato laid the foundation of a doctrine that was to be developed in the twentieth century by the phenomenologists. In the *Meno* he had clearly expressed the difference between opinion, which is always fleeting and not rationally founded, and science, which is always founded on reason and causality. Thus, from his reasoning as well as from the examples he took from ethics, mathematics, and medicine, we see how Plato gradually attained to his theory of Ideas. The *Republic* was only the conclusion of his long effort to express this conception of the good as clearly as possible. To be sure, there are many questions that either remain altogether unsolved or are solved in different ways at different stages in the development of Plato's philosophy; for example, exactly what is the place of what he calls right opinion? Must it be set in the same realm as false opinions, or must it be put very near reason, as Plato finally, in the *Philebus*, tended to put it? Yet in the *Republic* we find a clear distinction between opinion and science, and, over and above them, the intuition of the good.

According to Plato, our judgments about things admit of various degrees. We might even say that the lowest degree is not quite judgment; it is, according to the *Republic*, fancy and belief, which are related to the reflections or images of things, and indeed, as regards fancy, to the reflections of reflections, the images of images. Then there is a higher part of our knowledge, namely, scientific knowledge, which is much more satisfying because of its certainty and demonstrability—what Plato had already called in the *Meno* its stability. Nevertheless, even this remains always partial and multiple, always founded on hypotheses, and we have to go still higher, first to the unification of all the scientific judgments, and then to a canceling of the hypotheses, in a manner that has been

very aptly compared by A. E. Taylor to the passage from Euclidean geometry to non-Euclidean geometry. At this highest level there is opened up to us a universal science over and above every science, which is achieved not by reasoning, but by a kind of vision or intuition.

The Ideas are the foundation of ethics and of science. In fact, we might say that the problem of Plato was very close to the problem of Kant. How are science and morality possible? We must notice that the Ideas as conceived by Plato, although independent of sensations, are suggested by them. This is the character of human knowledge: sensations evoke in the mind things independent of sensation. Thus, Plato was able to oppose the theory of the Sophists that everyone is a judge of everything; for, said Plato, the patient is not a judge of the remedies. At the same time that he refuted the empiricism of the Sophists he also refuted their pragmatism; for there is a difference between real convenience and what seems to us convenient. Moreover, if we say that a practice is useful, we do not mean that it is useful to believe that the practice is useful. There is a reality of truth and a reality of convenience, and if we go a little farther, we shall see that this reality leads us to the affirmation of the universal Good.

Over and above the world of facts, for which the theory of the universal flux of Heraclitus is approximately true, there is a realm of permanent reality, on which the *Phaedo* and the *Republic* insist, and the world of sense is only an imperfect imitation of the world of Ideas.

But although the universal Good is objective, and is even the foundation of every objectivity, it can be perceived only by the human mind, indeed, every Idea has to be perceived by the mind. Plato shows in the *Theaetetus* that this perceiving is an active perception in which the soul works by itself, using such general terms as essence, number, sameness, difference, et cetera. In the realm of the soul we find everywhere reflections, comparisons, discriminations. The categories of existence and value are the operations of the soul. Ordinarily we do not have a clear consciousness of this working of the soul, but we do distinguish, for example, between merely hearing and listening.

Moreover, Plato saw very well, in the *Theaetetus*, that truth has

to be defined as a correspondence between our thoughts and reality, and the solution is further elaborated in the *Sophist*.

The theory of Plato was very much influenced not only by the moral speculations of Socrates, but also by the Pythagorean ideas about number, by Parmenides, and by Anaxagoras. We may say that the philosophy of Plato is a summary and a sublimation of the preceding philosophies into what the Hegelians would call a higher synthesis.

A shift of emphasis was effected by Aristotle, who, more empirical than Plato, but also influenced by the formula that like knows like, distinguished two minds, one formative, the other receptive. The first is identical in every individual; it is not born with us but comes to us from without and above. The second is essentially affected by all kinds of influences from the external world, it is primarily a kind of matter or power on which are imprinted the forms of things, which make it too pass into form. So for this second kind of mind we find a nearly empirical theory whose effect lasted throughout the Middle Ages.

The Stoics introduced a new element into what has been called the theory of knowledge, the will. For a judgment always implies an affirmation, which is a voluntary action.

With Descartes we return to the main tradition of rationalistic thinking, which had nearly come to an end with Plato.

As Descartes himself said, he took the term 'idea' to stand for whatever the mind directly perceives. In his answer to Hobbes he said that he employed this term because it was currently used by the philosophers for the form of perception of the divine mind. Whereas the Neo-Platonists and the Scholastics had tended to transfer to the divine knowledge the term Plato had used for human knowledge, Descartes applied it again, in agreement with the proper tradition of Plato, to human knowledge.

We might say that from a certain point of view the idealism of Plato, though not idealism in the sense in which that term was to be used later, was imperfect in so far as he considered the soul (though not in the *Theaetetus*) as open to the Ideas, but not as creating them. Moreover, Plato naturally represented the sensible world, about which man knew so little in his day, as a place of shadows and dreams. On these two points there is some progress in the idealism of Descartes as compared to that of Plato. In particular,

what was for Plato the sensible world of shadows was for Descartes a very clear and distinct idea, namely, the idea of extension.

According to Descartes, the criterion of truth is clearness and distinctness. These clear and distinct ideas that constitute truth never come from the simple observation of the external world, but are rather the product of the mind, as Plato had said in the *Theaetetus*, and indeed are innate in the mind, as Plato had shown in the *Meno*. 'Innate' does not mean for Descartes that they are completely present in the mind of man at the moment of his birth, but that there are predispositions toward these ideas, just as, he says, some illnesses are present in some persons, not completely and actually, but by virtue of the predisposition toward them in some families.

According to Descartes, from what we know clearly and distinctly about things we may draw conclusions concerning the things that are. This must not be understood in a subjectivist sense, as if knowledge created things, on the contrary, it is because things are what they are that we can know them clearly and distinctly.

In Descartes as well as in Plato, the consideration of mathematical knowledge has great importance. It gives these philosophers the idea that there are rational realities that the mind observes. Whereas Plato wanted to pass above mathematical knowledge, notwithstanding his ordinarily high opinion of it, Descartes was quite content with it and set it up as an ideal.

So, in a certain sense the dogmatism of Descartes is unlimited. Everything that is, is conceived by us. But we have to add that there are some things that, if they are conceived, are not comprehended. This is the case for God and His qualities. How can I, a finite being, comprehend the infinite?

Another distinctive feature of the Cartesian theory is the diffidence of Descartes toward time and his desire to apprehend in a single instant the terms between which he has found some rational relations. From this point of view we might say that the whole effort of Descartes is to reduce everything to what he calls the *natures simples*, which have been called, a little statically, atoms of evidence, and which are apprehended in a single instant. But it is not only the *natures simples* that are apprehended in this way. The relations between these *natures simples* may also be apprehended in an instant by an effort of the mind. One example of this is the *cogito ergo sum*, in which there is a simultaneity between the perception

of our thought and the perception of our being. But this is also the case for every one of the great truths of the philosophy of Descartes, and indeed one could say that the philosopher who wants to understand the system of Descartes has to see it as one great instantaneous truth, uniting the unity of our thought and our being with the unity of the essence and the existence of God, and, in the physical world, the unity of the source of the transmission of light and the last moment of this transmission, which for Descartes is contemporaneous with the first moment.

So intuition is the beginning and the goal of the Cartesian process. The deduction we might define as a relaxed and distended intuition, necessary when we cannot have the real intuition, and which it is the task of the mind to compress into a single moment; so that it is finally identified with intuition. As for enumeration, it is a still more distended process, in many cases preliminary to the others as well as auxiliary to them. We have said that intuition is the beginning; but sometimes, in order to find this beginning, we have to pass through enumeration and deduction. Yet at least deduction implies the vision of the *natures simples* and so intuition, which we again find at the beginning.

Spinoza presented his system in mathematical form, starting from definitions, postulates, and axioms. Descartes, at the end of some of his answers to the *Objections*, had already used the same method in presenting his philosophy. Spinoza wanted to reduce every philosophical truth to a kind of proposition inside one vast deductive system. What we may conclude from the *Ethics* about his method must be supplemented by the indications of a work written when he was very much younger, the *Treatise on the Purification of the Understanding*. Here he already distinguished among three kinds of knowledge, and in some respects we may compare his distinctions to those we have found in Plato, the third kind of knowledge being nearly identical with the highest in Plato's dialectics, and the second resembling the scientific knowledge described by Plato. The highest stage is conceived in almost the same way by Plato, Descartes, and Spinoza.

Leibnitz kept the Cartesian theory of the clear and distinct ideas and was sometimes very near Spinoza, at least in the first steps of his reasoning. He too identified the definition of a thing with the process of its generation. The true definitions are those which are

real, in opposition to nominal definitions. And the real definitions are those which show how the thing can be formed. In this manner we may define a circle as the figure described by a point turning around another point, called the center, and always maintaining the same distance between itself and the point around which it turns.

Leibnitz contended that the innate ideas are not at first fully explicit and developed in the mind. As he once put it, we learn innate ideas. But he maintained against Locke that the necessity and universality of these ideas cannot be constituted by experience. Taking the scholastic formula according to which there is nothing in the understanding that has not been first in the senses, he said that we must add: except the understanding itself.

For Leibnitz, as for Plato and Descartes, sensible experience is necessary for the awakening of the innate ideas in our mind.

On the whole, we may say that Leibnitz furnishes us with a kind of summary of the whole rationalistic doctrine, and in him we see even more clearly than in the others the rationalistic optimism implicit in all these doctrines. It was precisely this optimism that Kant was to attack.

We have seen that the rationalist philosophers whom we have mentioned conceived the relation between the subject and the object, when the subject sees the truth, sometimes as a relation of identity—of unity with Parmenides and at times with Plato and also with Spinoza—sometimes as a relation of likeness in the somewhat confused theory of Aristotle, and finally as a relation of correspondence, and at the same time of illumination, as in Plato and Descartes.

We may now consider the other great form of dogmatism, empiricist dogmatism, and here also we shall find the two ideas of correspondence and unity. The definition of truth as correspondence is in a certain sense implied in empiricism. But we may observe that when the empiricist says that the primary sensations are imprinted in us by the action of objects, he approaches very near to the idea of a unity between the sensation and its origin.

It is true that there were empiricists in antiquity, for example, the Epicureans; but the theory was fully developed by Locke. The Epicureans conceived perception as coming from little corpuscles sent out by the bodies to the mind. This was a materialistic empiricism.

If we classify the scholastic philosophers who followed Aquinas as empiricists, we must say that they took account of the forms of the object that the mind apprehended. However, it was with Locke that the problems implied in empiricism took a new shape, because, instead of keeping the materialistic theory of Hobbes, Locke adopted the Cartesian theory of representative ideas and admitted a most mysterious operation by which objects are represented in us by their ideas. Locke tried to trace a kind of genealogy of human ideas, always coming finally to impressions either outer or inner. It must be noted, however, that in the last part of his great work he admitted that the relations between ideas are apprehended by the mind independently of experience. And so the empiricism of Locke is more complicated than the reader would think upon finding in the first chapters the affirmation that nothing comes into the mind except from the external world and that the mind is like a *tabula rasa*, a blank sheet—formulas that Locke inherited from the Middle Ages.

Among these ideas that come into the mind Locke distinguished between those coming from the external world and those coming from the mind itself by virtue of the observations the mind makes upon its own operations. So we see that his is not a coarse empiricism that would refuse to admit that anything in the mind comes from the mind itself. Furthermore, Locke did not deny that the mind acts or operates on the outward sensations. And finally, as we have already intimated, in the last books of his work he admitted ideas that the mind acknowledges by themselves and to a certain extent independently of the external world.

The fact that empiricism is not a quite settled theory is still more apparent in the works of the successors of Locke—Berkeley and Hume. It may even be questioned whether Berkeley can be classified as an empiricist. His emphasis on the activity of the mind, his insistence on the intuition of the mind by itself (that is, on what he calls the 'notion') render his philosophy close to a kind of rationalism. On the other hand, his identification of ideas and objects may be interpreted as an extreme form of empiricism.

In his last work, the *Siris*, Berkeley decidedly leaves his empiricist standpoint and, under the influence of Plato and the Neo-Platonists, affirms the reality of a whole world of intellectual, rational ideas. One might say that Berkeley passed through all the

degrees of the classical theories of knowledge, from a rather crude empiricism in some parts of his *Commonplace Book*, to a Platonic rationalism in the *Siris*, where we also see, overshadowing these two theories, a kind of Platonic or Neo-Platonic mysticism.

Hume, although strictly an empiricist in the sense that he holds that every idea arises from a sensation, is nevertheless a particular kind of empiricist, since he sees very clearly that experience, as it is ordinarily understood by empiricism, is not sufficient to make us comprehend the all-important principle of causality. There is something in this principle that cannot be explained by the pure observation of facts, but only by habit and by the tendency of the mind to go from what it has been accustomed to see first toward the expectation of what it has observed to follow subsequently.

It may be noted that these theories of Locke and Hume have as their presupposition the Cartesian theory of representative ideas, which had already presented a difficulty in the philosophy of Descartes and remains a difficulty for the empiricists.

Comte and Spencer later gave a stronger formulation to the empiricist thesis of the dependence of all that is in our mind upon external conditions. They conceived the external world as completely forming our ideas, and in this sense we might say that these positivistic philosophers are very near the principle, if not the consequences, of materialism.

Empiricism has, in fact, undergone a continuous expansion. First with the idea of association, next with the idea of custom added by Hume in the eighteenth century, then with the idea of evolution and inheritance in the nineteenth century, empiricism has enlarged its horizon and rendered its mode of thought less stiff. To make us understand the necessity of the law of causality, to explain the idea of causality itself, Hume had recourse to the idea of custom, of something independent of particular sensations, although it is caused by them—an obscure natural force, a kind of expression of that universal benevolence which the eighteenth century loved to invoke. Doubtless the modification of the empiricist's theory made under the influence of the idea of evolution is theoretically less important. Yet perhaps there are acquired qualities that may be transferred from parents to children and appear in the latter with the character of generality and necessity.

In examining empiricism, we might first study the meanings of

the word 'experience.' In Greek philosophy 'experience' means routine and is opposed to scientific knowledge. The meaning of this term changed under the influence of science, for the scientists began to make experiments and were not satisfied with mere observations.²

Here too we may observe a kind of dialectics in the changes in the meaning of the term 'experience,' since what was first routine was later to liberate man from routine.

But there is another experience than scientific experience. The mystics, such as Madame Guyon, 'experienced' the presence of God. In this sense we may speak of a religious experience, and we are reminded of the title of James's book on the varieties of religious experience.

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So we see the difficulty of defining empiricism. But at least we may try to find some common elements among the different meanings of the term. Yet there will always be this opposition between a passive and an active conception of experience. Religious experience is rather passive; although there are preparations and exercises, at the very moment of this experience the soul receives a revelation. Scientific experiment, on the other hand, is essentially active. But might we not say that at the last moment here also there is a kind

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Although empiricism is right in principle, we must say that its controversy with rationalism remains unsettled. The empiricists can always point to something sensible that could be the origin of an abstract idea or of a principle of reason: the flight of a bird can give us the idea of a straight line; the undulations of water, the idea of a curve; measuring, the idea of equality, and so on. But, the rationalist can answer, there is in nature no perfectly straight line, no perfect circle, no perfect equality. In order to discover the circles, the straight lines, and the equalities in nature, we must have them beforehand in our mind. And particularly as regards what are called

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the principles of reason, whence could come their character of generality and necessity except from reason, from what Plato conceived, rather mythically it is true, as reminiscence, from what Leibnitz, following the Pythagoreans, called the spark in the soul? However, the empiricist will reply to this argument by contending that this universality and necessity are constituted by the mind. Moreover, these ideas are not so simple as they appear, nor so unquestioned. The universality of some of the mathematical principles has been challenged by the non-Euclidean geometers, and the universality of the principle of contradiction, by the sociologists (or at least by the pre-rational types of mind they study). Nevertheless, the rationalist will argue, the important point is less universality than necessity. To which the empiricist might reply that the idea of necessity is rather complex, negative, and retrospective.³ And so the controversy continues and could continue without end.

We could make the same observation concerning the other great theme of the rationalist-empiricist controversy, namely, the activity of the mind in perception. From Plato to Descartes and Hegel, this has been one of the most important arguments of the rationalists. They have always insisted on the element of reflection, of mediation, present in perception. But here again the empiricists can answer that these reflections are themselves the result of observation. At this point the controversy between empiricism and rationalism is merged in the wider controversy between the partisans of the mediate and the partisans of the immediate.⁴

So we find ourselves always faced with the same question. Who was right in this controversy, Plato or Protagoras, Descartes or Hobbes and Gassendi, Locke or Leibnitz, Hume or the successors of the Cambridge Platonists?

The first answer that might present itself would be that we have here two forms of thought of which one is perhaps valid in one field and the other in another. For example, we could say that Descartes, Spinoza, and Leibnitz are right with regard to mathematical knowledge, and Locke (in his empiricist affirmations) and Hume with regard to empirical knowledge.

³ It is only after the fact, as Bergson has shown, that we can really speak of necessity.

⁴ We reserve this question for the next chapter.

There is something right in this answer, but it is only a first step toward a solution.

We could also say that one is correct from an epistemological, the other from a psychological, point of view. This answer too is partly right, but it is not sufficient.

In order to go beyond the terms of the problem as they are usually put by both rationalists and empiricists, we may notice first some agreement between rationalism and the ordinary type of empiricism. Locke and Hume agree with Descartes in accepting the criterion of clear and distinct ideas, although perhaps there is some divergence about what they understand by clarity. And there is also common to both schools the very general idea that like knows like. We may add that, particularly at the end of the nineteenth century, doctrines appeared that united rationalistic and empiricist affirmations in a kind of naturalism in which clarity and distinctness were kept, but as products of experience and observation.

Besides the two common ideas we have traced in empiricism and rationalism, there is perhaps a third, which we might call the denial of the faculty of transcendence in man. The empiricists, believing that every idea comes from sensation, contend that there is nothing in the mind that can have a character different from that of sensation and that consequently every one of our ideas remains relative and provisional. The rationalists, on the other hand, in view of the necessity and universality of rational ideas, argue that they cannot be derived from experience. Thus, empiricism is guilty of a kind of historicism that denies everything that could go beyond what produced it, and rationalism is guilty of a kind of static conception that denies the dynamic power of what the rationalists call the mind. May it not be that the human mind is constituted in such a manner that it makes those great constructions that are the ideas and principles of reason?

It is one of the merits of phenomenology to have striven to describe the character of the principles of reason. Phenomenology proposes to take the rational principles as they are known as, to use James's expression. Here a radical empiricism paves the way for a non-hypostatizing rationalism.

This can also be expressed in another of the phrases of contemporary philosophy. Ideas or principles are constellations of qualities, according to the theory of Alexander; they are like the fourth note

of Browning, which is no longer a note but a star—the products of emergence rather than of evolution.

In other words, the question of the origin of knowledge has to be separated from the question of its nature, since the nature of knowledge is in a certain sense independent of its origin.

We also have to ask ourselves whether we can conceive of the mind as completely indifferent to its contents. This would be the logical presupposition and content of empiricism, but, as we have already seen, neither Berkeley nor Hume would admit such a presupposition.

One of the characteristic features of empiricism is its 'historical' approach to the problem of knowledge. Now we can question the validity of history, at least in this field. For we are not chiefly interested here with the growth and development of knowledge, but with its nature. Whatever may have been its growth and development, it possesses certain specific characteristics, and it is these we first have to consider. To be sure, empiricism will always be able to tell us that it can explain them historically. But the question is whether history really explains, whether the product of history does not itself transcend history. And although it would be a mistake to hypostatize this transcendence by calling it a form or an idea, as the rationalists do, it exists nevertheless.

It would be incorrect to say that the theory of Kant is situated between empiricism and rationalism. In fact, it goes beyond both classical rationalism and the empiricist theory. If we had to classify it, we should say that it is in no sense an empiricism, but a rationalism. However, although one could find in Plato, Descartes, and Leibnitz what we might call pre-Kantian elements, Kant's is quite a new kind of rationalism. He himself called it transcendental idealism because of its reference to the question of the possibility of knowledge, particularly mathematical and physical knowledge. The great difference between Kant and the earlier rationalists is that he does not think that the ideas that are in us are reproductions of things that are in themselves. For the classical rationalists, whether Plato, Descartes, or Leibnitz, our true ideas are true because they reproduce an intelligible reality or because they are themselves an intelligible reality. Kant replaced this idea of reproduction or duplication by the idea that truth is formed and indeed

almost created by us. For Kant, there is no independent realm of objective realities, as there is for Plato and Descartes. According to Kant, we can have no idea of the world of things-in-themselves, since if we know a thing, we place it under our forms and categories and so transform it. Thus, the intelligible world, which was the best known to Plato, is unknown for Kant, at least from the point of view of the theoretical reason. And the world we really know is—also contrary to Plato—the world of our experience, that is, the world in space and time connected by the laws of causality and substance. But—and this is one of the most characteristic features of the philosophy of Kant—when we say that we know this world, we do not mean that we receive it either from sensations, as the empiricists contend, or from innate ideas, as Plato and Descartes hold, but that we really constitute it ourselves. Experience, far from explaining the mind, is constituted by it.

Kant was first a Leibnitzian and what we might call a rationalist of the classical type. Leibnitz and his disciples thought that reason understands the world because the world is the expression of the universal reason, i.e. the Good. This was also the idea of Descartes and Plato. For Leibnitz, the principle of causality is a particular aspect of the principle of sufficient reason: nothing happens for which we cannot give the reason. His was a rational and moral optimism. God has created the best of all possible worlds. Voltaire questioned this optimism on moral grounds. There are evils in the universe. The earthquake of Lisbon is without justification. Our world is not the best of all possible worlds. Kant raised the same objection as Voltaire, and also from a moral point of view. For Kant's moral conceptions were tinged by his religious ideas. He was educated in the Pietist school of Protestantism, which insisted on original sin. We are fallen creatures. There is something positively evil in the universe—what Paul had called the law of sin. Evil is not only the result of ignorance, not only the absence of knowledge, as it is for Socrates, for whom virtue is knowledge, there is a kind of vice in the human will itself. But this was not Kant's only reason for questioning the Leibnitzian optimism and rationalism. Not only from the point of view of ethics, but from the point of view of knowledge and of Being, we see everywhere not harmony, but opposition and strife—strife between forces in mechanics, negative quantities in mathematics, et cetera. Nor can we reduce this strife

to a mere difference of degree, it represents a real, an ultimate opposition. So, for Kant, the facts of ethics, mathematics, and physics destroyed rationalistic optimism.

Besides, there was the influence of Hume. 'Hume,' said Kant, 'awakened me from my dogmatic slumber.' Leibnitz thought that he had refuted the empiricism of Locke in pointing to the universality and necessity of the principles of reason, which, in agreement with Plato and Descartes, he classified among the innate ideas together with such ideas as those of God and the soul. But Hume had shown that the universality and necessity of the principles of reason are not real universality and necessity, but appearances created by the mind. There are no universal and necessary ideas, but only ideas of universality and necessity. The curious fact is that at the same time that he refuted Leibnitz, Hume refuted ordinary empiricism also. For, according to him, the idea of cause does not come from any impressions, either outer or inner, but from a kind of link between impressions, a link supplied by custom or habit, so that when one has seen smoke or heard thunder, one concludes that there has been fire or lightning. Hume demonstrated, in opposition to the rationalists, that we never deduce the idea of the effect from the idea of the cause, and, in opposition to the ordinary empiricists, that in assigning a cause, we must invoke something other than sense impressions. He thus came very near to what was to be the theory of Kant, and many of Hume's formulas are almost Kantian, since the principle of causality was explained neither by pure ideas nor by pure impressions, but by a certain activity of the mind, namely the custom and expectation that gradually develop in it. But the very fact that Hume conceived of this development as gradual shows that he still remained on the plane of empiricism and had no idea of the new rationalism that was to issue in great part from Kant's reflections on this theory of causality.

On the other hand, Kant was made more and more conscious of the chasm between concept and reality. From clear and distinct ideas we cannot draw conclusions about reality. The clarity and distinctness of our ideas prove that they are clear and distinct, not that something in reality corresponds to them. This is a point of particular significance for Kant's criticism of the Cartesian demonstration of God's existence (which had been accepted with one qualification by Leibnitz). from the fact that the idea of God is the

idea of a perfect Being and that this implies the idea of existence, we can conclude nothing about the reality of His existence.

Kant saw that he had to take his starting point from three facts—two positive, one negative. The first was the fact of science as it was constituted by Euclidean geometry and Newtonian physics. Just as the physics constituted by Galileo was one of the reasons for the development of the philosophy of Descartes, so Newtonian physics was one of the reasons for the development of the philosophy of Kant. The second fact was the existence of the moral law within us. His Pietistic education and the ideas of Rousseau had a great influence on Kant's moral philosophy. The third fact—the negative fact—was the uncertainty of metaphysics. The justification of science and morality and the explanation of the uncertainty of metaphysics—this was the triple aim of Kant's reflection.

Let us try to give a more precise formulation of Kant's ideas about the first of these three facts. In order to do so, we must consider the theory of judgment. For science is a sequence of judgments. What is a judgment? As we have seen, Kant said, in agreement with Aristotle, that a judgment consists in the affirmation of a relation between a predicate and a subject.⁵ We have already mentioned the distinction between analytic and synthetic judgments. It will be recalled that a judgment is analytic when the predicate adds nothing to the subject, for example, when we say, 'Bodies are extended,' extension adds nothing to the concept of the subject, being extracted, so to speak, from the concept of body. Synthetic judgments, on the other hand, such as 'The table is heavy,' add something to the concept of the subject. We have also alluded to the distinction between *a priori* and *a posteriori* judgments. The former, such as 'A straight line is the shortest distance between two points,' are independent of experience, whereas the latter, such as 'All men are mortal,' are dependent on experience.

Now if we combine these two classes of judgments (leaving aside the analytic *a posteriori* judgments, which are of no use, since we do not need to have recourse to experience in order to formulate analytic judgments), there remain analytic *a priori*, synthetic *a posteriori*, and synthetic *a priori* judgments. It is this last class that

⁵ This might be questioned, because there are impersonal judgments, such as 'It is raining,' and judgments of relation, which it is very difficult to reduce to the subject-predicate form.

presents a problem, in fact the whole problem of the *Critique*, which we can now formulate in these terms: How are synthetic *a priori* judgments possible? Analytic *a priori* judgments like 'A triangle has three angles' and synthetic *a posteriori* judgments like 'The table is green' present no special problem. But we do not see so easily how such judgments as 'A straight line is the shortest distance between two points' or 'Every event has a cause' (which is the principle of causality) are possible. How is it possible that the synthetic *a priori* judgment tells us something about reality?

There are three solutions of the problem of the relation of the mind to reality: either reality creates the mind by impressions (this is the empiricist thesis, its more extreme form passing into materialism, that is, the affirmation that the mind itself, and not only its contents, is created by material reality); or there is a correspondence between the content of the mind and reality because they are both created by God (this is the doctrine of Spinoza and Leibnitz); or reality is created by the mind. The last was the thesis of Kant, and what Kant himself called his Copernican revolution.

According to Kant, the sciences acquired the character of certainty from the moment that propositions were made to depend not on observation, but on deduction or active experiment based on deduction. It was in this manner that geometry was constituted in Greece by Thales, and physics in Italy by Galileo and Torricelli, for they actively deduced and experimented. Ought we not to do the same for philosophy? Here also, if we want to acquire some certainty, we must explain the phenomenon in terms of the mind, and not the mind in terms of the phenomenon. Is not this (though, to be sure, in quite opposite terms) something like a Copernican revolution, making the sun and the whole external world revolve around our earthly but eternal spirit?

Kant believed that the solution proposed by Leibnitz would be very much like that proposed by the empiricists, because Leibnitz, in effect, would have us observe the intellectual world in the same manner as the empiricists believe we observe the empirical world. More generally, if we had the intellectual intuition that is affirmed by rationalists like Plato, Descartes, and Leibnitz, we could not impose the forms of our mind upon phenomena and so we should be barred from real knowledge. We see how closely Kant links his Copernican revolution with the denial of intellectual intuition.

Phenomena, that is, all appearances (as distinguished from the noumena, which cause appearances to appear) are constituted by form and matter. The terms 'noumena' and 'phenomena' are borrowed from the Platonic vocabulary. For Plato, the noumena constitute the intelligible world and phenomena the sensible world. But by a kind of paradox, what we can understand, according to Kant, is not the intelligible, but the sensible world, when we apply to it the forms of our thought. So in Kant our spiritual eye is closed to what it is open to in Plato and open to what it is closed to in Plato. This is explainable in part by the progress of physical science.

As regards the noumenon, there are many difficult questions centering about the thing-in-itself, the transcendental object, the transcendental subject, the relation between them, their identity or disparity, et cetera. We mention these questions in order to show the obscurity of this aspect of Kantianism.

Moreover, within the phenomenon Kant distinguished matter and form, without being very clear whether or not the matter of the phenomenon is the noumenon.

Thus, the system of Kant unites two distinctions, the intelligible and the sensible, form and matter—the one clearly Platonic, the other Aristotelian—but unites them in a rather obscure way. Perhaps the matter of the sensible is this unintelligible intelligible of which we have spoken, and the form of the sensible comes from the mind, which is in part unintelligible. It would still be a question whether the mind is a part of the intelligible or of the sensible world. There is a part of it that belongs to the intelligible, and another part that belongs to the sensible world; and the relation of these two parts is most obscure.

In order to classify the categories the mind applies to experience, Kant made use of the Aristotelian table of judgments. This is one of his mistakes. We have seen that he had already made an error in accepting the Aristotelian definition of judgment. Now he took the Aristotelian classification of judgments as a basis for what he called his table of categories, though somewhat modifying the Aristotelian tradition. Then from these categories he deduced the axioms of perception, the anticipations of observation, the analogies of experience, the postulates of empirical thought—a whole network of relations in which we apprehend reality by means of our ideas of extensity, intensity, causality, substance, and reciprocity. Kant

called things possible if they at times agree with our thought, real if they now agree with our thought, and necessary if they always agree with our thought.

Experience is the product of the action of our forms and categories upon the matter, which is the appearance of things-in-themselves. But in order to bridge the interval between the abstractness of the categories and intuition, Kant introduced, in one of the most discussed chapters of the *Critique*, what he called the schemata of the understanding, which are the products of an art of imagination, of an unconscious activity hidden in the depths of the human soul. The schemata, like the categories of modality, are related to time. So one can see the particular importance of the form of time in the system of Kant.

Kant's conclusion from all this is that without intuition the concepts or categories would be empty, and without the concepts the intuitions would be sterile. Knowledge is always the result of the co-operation of concepts and intuition, a co-operation that takes place in a kind of middle ground between noumena and the empirical unorganized datum.

Thus, according to Kant, although our knowledge begins with experience, it by no means follows that it all originates from experience.

We see too the important place given to the ideas of relation, function, and law in the philosophy of Kant. Nature is a system of laws.

And this system is organized by the human reason. Here man takes the place of God. The citizen, the universal citizen so to speak, is king. This is a metaphysical Fourteenth of July rather than a Copernican revolution.

We can easily see the consequences of such a theory for the constitution of metaphysics. Since the forms and the categories are imposed by us on nature, they cannot be applied to the noumena. In fact, it was Kant's reflection on the antinomies that partially motivated the elaboration of his whole system. If space and time are only forms, certainly the problems of the infinity or finitude of the world in space and time are pseudo-problems. And in the same manner in which he liberated, or believed that he had liberated, the human mind from these difficulties about the world and even from the idea of the world itself (since this idea is only a figment),

Kant also destroyed the possibility of affirming the soul as a spiritual substance and, finally, God as the origin of the world and the soul. It was left to the practical reason, as distinguished from the theoretical reason, to make its voice heard, to demand from us that we accept the postulates necessary for the constitution of the moral law: freedom, the soul, and God.

There are some presuppositions of Kantian thought that we have to make explicit. We have already briefly alluded to them. They are primarily the distinction between phenomena and noumena (and the affirmation that the existence of the second is necessary if the first exists) and the distinction between matter and form. And there is also the denial of the possibility of an intellectual intuition. The development of the post-Kantian philosophies shows how some of the most important disciples of Kant were led to abandon these distinctions and this negation.

Nor does Kant provide a sufficient explanation of the reason why we give this or that place in time and space to this or that appearance. It seems, even according to Kant, that we have to take account of some order that exists independently of the mind, so that we are led to abandon the very idealism by which Kant defines his theory.

We have analyzed first the rationalistic theories, then the empiricist theories, and then the new form of rationalism that was proposed by Kant. In discussing Kant, we have already left dogmatism and are confronted by what we may call a relativistic theory. But this relativism, according to which everything in us is related to the structure of the human mind, is at the same time dogmatic, since Kant believed that the human mind is identical with the rational mind in general and that its structure is such that it can make of experience an understandable whole.

The relativism of Comte seems to be more radical, since he affirms very strongly that the content of our minds is related to our bodily structure, particularly the number of our senses, and to our situation in history. He retains the dogmatic formulation of the idea of truth as a copying of relations, but this copying always has to take account of our place in time and space. It can readily be seen that there is a kind of contradiction in Comte's theory or at least that there is at the bottom of this theory a kind of concealed dogmatism.

Hegel too is a philosopher very difficult to classify either as a dogmatist or a relativist. He is a relativist in the sense that for him

every form of human knowledge is only a stage in the universal process and each one of these stages is imperfect except the last one. Yet it is precisely this exception that makes Hegel's system at the same time a form of absolutism: in the last stage of development we reach complete reality and complete rationality (the two being not separated, but identical), that is, we reach an absolute knowledge; and so the relativistic aspect of the system, which is applicable to the whole course of human development, has to be completed by the absolutistic affirmation that at the moment which is historically the last, but which is metaphysically an everlasting moment and perhaps the first moment, we possess absolute truth.

One of the most recent and most interesting forms of relativism is pragmatism. The term is not very well chosen because it happens that the Greek word *pragma* means 'thing,' whereas the term 'pragmatism' was chosen because *prattein* means 'to make.' Pragmatism takes the direction indicated by Kant when he said that we constitute our knowledge, although the pragmatists give this idea of the constitution or creation of knowledge a meaning so different from that of Kant that it is perhaps better to keep the two conceptions separated.

Let us first consider the reasons why pragmatism developed at the end of the nineteenth century. To be sure, it might be said that there were pragmatists even in antiquity. The name might be applied to Sophists like Protagoras, who said that man is the measure of all things. And in fact, Nietzsche, who is very near pragmatism, and the British pragmatist F. C. S. Schiller have claimed Protagoras as one of their most important predecessors. But it is also a fact that the clear formulation of pragmatism was not attained until the end of the last century.

This may be explained by the state of biology, psychology, religion, and the criticism of science at that moment. All these conditions contributed to make the growth of pragmatism possible.

Biology, with the Darwinists, taught that there is something called the struggle for life and that the organs of the living beings that are maintained in evolution are useful to them in this struggle. So, if intelligence has developed, it is probably useful. And thus we are near the idea that truth and usefulness are very close to each other.

In the second place, psychology taught that everything in the

mind is directed toward some end. As James says in his *Psychology*, every mental event is teleological, and the mind is directed always toward the future.

At the same time, the development of the non-Euclidian geometries, Maxwell's use of contradictory hypotheses (of emission and undulation), and the insistence on the importance of hypotheses that we find in such critics of science as Henri Poincaré, Pierre Duhem, and Edouard Le Roy ⁶—all these were important tendencies favoring the progress of pragmatism.

Then we also have to take account of the religious needs of the countries in which pragmatism developed most explicitly, namely, Great Britain and America. This is particularly notable in one of the aspects of the work of William James and in his book entitled *The Will to Believe*. According to him, our belief has a great influence on the very possibility of our actions, and just as our faith in our ability to jump a river will render us the more able to jump it, so if we believe that the world is good, the world will be better by the very fact of our belief. Indeed, James even says that our belief in God may in a certain sense create God. And it was not only in James that religion and pragmatism were linked. Many of the pragmatist philosophers rejected the absolutistic theories derived from Hegel because they did not offer man the possibility of praying personally to a personal God. In France, the religious side of pragmatism was visible in Le Roy's theory that the belief in a miracle renders the miracle possible. However, we must also add that some pragmatists are completely outside these religious concerns. This is true, for example, of Dewey and his disciples. There is a naturalistic pragmatism, as there is a pragmatism directed toward religion.

Also contributing to the development of pragmatism was the importance given to time, which has been more and more emphasized since Darwin and Hegel. In fact, the pragmatism of Dewey may be derived from the consideration of the growth and development of things as conceived by Hegel. In certain respects pragmatism goes even further than Hegel in its emphasis on time. Although Hegel said that the future is the fundamental aspect of time, this idea is much more prominent in the pragmatist theories than in

⁶ We find in Le Roy the formula: 'le fait est fait,' i.e. facts are made

Hegel and assumes very great importance. For James and Bergson would naturally agree with Hegel on this point, and so would Schiller and Dewey. The mistake of the classical systems of philosophy was to conceive truth as the copy of a pre-existing reality—the Platonic Ideas or the clear and distinct ideas of Descartes. Truth was retrospective. Now, according to James, truth has to be considered as prospective, that is, ideas have to be judged not by their principles of derivation but by their consequences. To begin with a very concrete example: if we have a true idea of a chair or of a door, this will be seen because we can use the chair or the door. But even in things more remote from ordinary life, it is by consequences that we judge the truth. Indeed, even this is not saying enough. The truth is completely identical with verifiability by the consequences.

Still another idea that may explain the development of pragmatism is the idea of value. In the nineteenth century more than ever the philosophical mind attained a clear consciousness of value as opposed to fact and so had to raise the question of the relation of truth to value. Here pragmatism has a very definite answer: the true is a value, as well as the good and the beautiful. And this is another way of saying that truth has a use.

These observations enable us to understand a definition that a French philosopher, René Berthelot, has given of pragmatism. He defines it as utilitarian romanticism. What we have said about the importance pragmatism gives to the consequences of ideas and beliefs shows in what respects it is utilitarian. As for its romanticism, this may be seen in its insistence on organism, that is, in its vitalism, and also in its insistence on the dynamic character of things, and, particularly in James, in its emphasis on adventure, chance, and risk.

A third idea, related to those of time and consequences, is the idea of action. It has been said that if pragmatism has found its chief exponents in the United States and Great Britain, if it has appeared as a kind of Anglo-Saxon philosophy, this is precisely because of the importance it gives to the idea of action.

Now that we have noted the conditions that have permitted the development of pragmatism, we may try to define it more thoroughly. As we have seen in considering the psychological origin of this philosophy, pragmatism insists on meaning. Peirce, the philosopher who first used the word 'pragmatism,' formulated the principle

that when we make a judgment, we must first of all see very clearly what difference it would make to affirm or to deny its truth. And James has stressed the point that this difference has to be quite precise; the importance is not so much in being practical as in being precise.

This idea has been expressed by James in other ways too. According to him, a true idea is an idea that works; we must always see the 'cash-value' of our ideas; the truth of our conceptions always lies in the fact that they lead us to particular moments of experience.

Many different 'nuances' of pragmatism may be distinguished. There is the pragmatism of James, characterized, as we have seen, by his theory of the will to believe and his radical empiricism. There is the pragmatism of F. C. S. Schiller, which he himself calls a humanism, affirming, on the one hand, the fact that we make the truth, that when we formulate a true judgment, we verify it in the strongest, the etymological, sense of the word 'verify,' that is, we make it true, and, on the other hand, that a social element is essential to truth, namely, the agreement and harmony between different minds. And there is the pragmatism of Dewey, which has been called 'instrumentalism' or 'functionalism.' Thought is a tool, an instrument. This instrument is used in order to solve problems that practical life confronts us with. Man is distinguished from every other being by the problematic character that reality assumes for him. He is always facing and solving problems.

To be sure, one could also mention the romantic pragmatism of the Italian Papini and the rather religious pragmatism of some French philosophers, but the most general characteristic feature of pragmatism, at least in its first forms, is always the one that has been defined by Berthélot, romantic utilitarianism.

Yet the naturalistic and experiential pragmatism of Dewey is very different in some of its aspects from James's theories and from the romantic interpretations of pragmatism. It is much nearer Hegelianism and evolutionism with their broad views of the development of humanity. It does not admit anything like the legitimacy of the will to believe. But, according to Dewey, there is good reason to have confidence in human nature, apart from any transcendent ideas. There is a spontaneity in evolution. Man, when he faces his problems with the tools of intelligence and science, will solve them little by little. Moreover, within this propulsive drive of evolution there are

values—aesthetic and moral satisfactions—which Dewey calls ‘consummations.’

Mead in his tentative philosophy unites with pragmatism some of the teachings of the first philosophical works of Whitehead. With Dewey and Mead there has been a tendency to expand the scope of pragmatism, to broaden it into a more comprehensive system. The question is whether there is not something more structurally definite in its first formulations by James and Dewey than in this last phase as represented in Mead and the later works of Dewey, notwithstanding the effort of which they testify and the broader world view that they sometimes seem to present.

One could ask the pragmatists what is the precise meaning they give to such terms as ‘consequences,’ ‘effects,’ ‘working,’ et cetera. Sometimes they seem to use these words with quite a utilitarian meaning, but sometimes also, especially in James and Schiller, we find the idea that if a truth harmonizes with other truths, if it makes a kind of whole with them, this would constitute a consequence of our judgment sufficient to make us affirm that it is true. So there is a whole scale of meaning of terms like ‘consequences,’ from a rather coarse conception to one more abstract and rational.

We may also ask whether it is not necessary to have recourse finally to something that is no longer good by virtue of its consequences, but good in itself. If a thing is good by virtue of its consequences, and these are themselves good by virtue of their consequences, and so on, we should have to regress *in infinitum*. As Aristotle has said, we have to stop somewhere; and this necessity is even more obvious here than in the case with which Aristotle was concerned (as we shall see in the chapter on God).

There is, finally, the question whether pragmatism is consistent with itself. For in saying that the truth of an idea is its working, are we not in danger of destroying the very idea of truth? We feel that when we judge a proposition to be true, we affirm something different from the fact that the proposition has useful consequences. And if we identify these two affirmations, we do away with the very idea of truth, which we wanted only to define and not to destroy. Indeed, we may say not only that pragmatism is dangerous because of the criticism of truth implied in it, but also that it does not conform to that loyalty to reality which James asks of the philosopher in advising him so many times to take things at their face value.

Notwithstanding these criticisms, it must be admitted that the pragmatist philosophers have made a contribution to a more precise, more temporal, more active conception of truth.

The current of philosophical ideas has not stopped at pragmatism. At the very time when pragmatism was being given formulation, James developed another aspect of this philosophy, which he called 'radical empiricism'. Radical empiricism opposes both the rationalistic and the empiricist theories on the ground that they failed to take account of the presence of relations within experience. The empiricists saw only disconnected terms, though there were some exceptions such as Hume, who tried to connect the disconnected terms by the strange force he called belief and custom. The rationalists, on the other hand, seeing that the empiricists ignored relations, and agreeing with them implicitly that there are no relations in experience, placed the source of the relations in the mind. But James, in showing that the relations as well as the terms related are included in experience, that there are, as he says, feelings of *if*, of *that*, of *with*, and so on, makes us aware of the insufficiency of both rationalism and empiricism.

Another important thesis of radical empiricism is its assertion that the idea of a thing and the thing itself are not two different realities, but one, seen in one case from a psychological point of view, and in the other case from an objective point of view. For example, the chair and my idea of the chair are not different realities, there is not on one side the physical being of the chair, and on the other side the psychological being of my idea of the chair. It is exactly the same thing that is called either the chair or the idea of the chair, according to whether it is considered in relation to physical objects, like tables and doors, or in relation to psychological objects, such as the idea of unity, radical empiricism, et cetera. So this theory of James seems to free us, and perhaps really frees us, from the theory of representative ideas, which Cartesianism had used and which the empiricists had inherited from it.

This aspect of James's philosophy might be complemented by the statement, made in his *Psychology*, that when the child sees the world, he does not at first distinguish interiority from exteriority and is outside the distinction between subject and object.

The philosophy of Bergson took form at the same time as pragmatism and radical empiricism. There are many points of agreement

between Bergson and James, since both emphasize the importance of action in every great function of the rational mind, but there is an ultimate disagreement between them: whereas for James, the consideration of action is necessary for the definition of truth, according to Bergson, action and what we may call pragmatic considerations must be kept from our mind if we want to see truth. In other words, Bergson condemns the intrusion of action into our search for truth, which, according to him, must be meditation and, more specifically, intuition.

This notion of intuition has many different aspects in Bergson. First, we may stress the point that this Bergsonian intuition has very little in common with what other philosophers have understood by 'intuition.' There is an intuition in Plato by which, over and above the process of reasoning, we apprehend a supreme reality in a single act of the mind. There is the Cartesian intuition, which, as we have seen, is like a compression into an instantaneous act of different moments of time. There is the sensible intuition conceived by Kant in the *Transcendental Aesthetic*, an intuition which, by means of the forms of space and time—two infinite wholes, present to consciousness in their totality—constitutes and organizes our experience.

And not only does 'intuition' have different meanings for different philosophers, even for the same philosopher this term has different meanings and values. For example, what may be called the intuition of the Ideas in Plato is different from the intuition of the Good, which is above the Ideas and is their origin. Nor is the intuition of the *natures simples* in Descartes quite the same as the intuition of that pre-eminently existing and superabundant *nature simple* which is God. And in Kant too there are three concepts of intuition: the intellectual intuition, which is creative and peculiar to God; the intuitions and forms of intuition that are space and time; and the foundation of these intuitions and of the categories and the Ideas, which is the transcendental ego, grasped in an act of the mind analogous to the Cartesian intuition of the *cogito*. In fact, it is the absence of the intellectual intuition in man that renders necessary his sensible intuition; the absence of the intellectual intuition constitutes the finitude of man, which is an essential presupposition of Kant's theory. The successors of Kant restored this intellectual intuition, which he had denied to the human mind. Here certainly,

at least in Schelling, we come rather near Bergson. And we shall see that in Bergson also the intuition of the self in *Time and Free Will* is not the same as the intuition of the past and the intuition of the external world in *Matter and Memory*, nor is it the same as the intellectual sympathy defined in *Creative Evolution*, although for Bergson these terms all have a common meaning, namely, knowledge of the mind by the mind. Despite the fact that the Bergsonian intuition is comparable to the Platonic in their common opposition to discourse and reasoning, and even more to the Schellingian intuition, Bergson's conception is nevertheless different from the others by virtue of the connection he established between his theory of intuition and his theory of duration. Intuition is essentially the act by which we unite ourselves to ourselves, by which we see ourselves immediately, i.e. without any intermediary. (In fact, this idea of immediacy is the most general characteristic of all the kinds of intuition we have tried to define.) But the Bergsonian self is a ceaselessly changing self—a duration.

In *Creative Evolution* Bergson has given a seemingly different definition of intuition, describing it as an 'intellectual sympathy,' or, we might say, using Hegelian terms, a synthesis of intelligence and instinct. He starts from the affirmation that life—*élan vital*—has divided itself into two great streams, the one moving in the direction of instinct, the other toward intelligence. But neither one is completely satisfactory. Intelligence asks itself questions that it cannot answer. Instinct does not give explicit answers because it does not even know the questions. So, neither intelligence, a faculty of adaptation, which we might describe as a form without contents, nor instinct, a content without any form, can solve our problem. And it is only when we try to reunite them both by that faculty which Bergson called intuition that we are able to see reality.

Here we come to a third definition of intuition, given by Bergson most explicitly in his *Introduction to Metaphysics*, as the act by which an absolute reality is revealed to us. Ideas and concepts give only external points of view. But there is a moment, whether in the admiration of a landscape or a work of art or in the composition of an essay or a poem, in which we place ourselves in the center. There is no longer a point of view. We are in the presence of reality itself and we possess that intellectual intuition, to use Kant's word, which Kant had denied to man.

And there is finally the definition Bergson gives in the Introduction to *La Pensée et le Mouvant*, where he emphasizes the spiritual character of intuition. Intuition is the knowledge of mind by mind.

All these definitions are not contrary, but supplementary, to one another. This is natural, since even a theory of intuition is a theory; it is not completely an intuition, and, though it originates from an intuition, it is a series of points of view on intuition.

We have passed from the study of pragmatism to the study of Bergsonism; but we may notice that in doing so we have passed from relativistic theories, such as Kantianism, positivism, and pragmatism, to a new form of dogmatism, which is very different from empiricism and rationalism, inasmuch as Bergson agrees with James in condemning both of them, but which reinstates, in face of pragmatism, the affirmation of an absolute.

There is another aspect of the philosophy of Bergson of which we now have to take account because, united to the theory of consciousness presented by James in his radical empiricism, it has contributed to the growth of another dogmatism, namely, the realistic, or rather neo-realistic, dogmatism. It is what may be called Bergson's theory of images, which he presents in the beginning of *Matter and Memory*. According to this theory, if we want to solve the problem of knowledge, we have to place ourselves, as James had already said, at a moment of time prior to the distinction between subject and object. Indeed, this distinction is not so basic as it appears even 'in the natural attitude,' to use Husserl's expression, for, like James, Bergson held that objects and the subjective representations of them are fundamentally identical. The object is not on one side and its representation on the other. If we see a lamp, for example, we cannot say that we are here and the lamp is there; but rather that in a certain sense the lamp is in us and we are in the lamp, that there is a presence whose nature would be completely distorted if we were to translate it into the relation between the Cartesian representative ideas and what they represent.

To describe his theory on this point James used the expression: an empiricist philosophy of identity. In fact, this is the old idea of unity, of identity, which we noted in the rationalistic theory of Parmenides, but here it is on the empirical level.

So we see that this idea of the identity between the knower and

what is known is one of the principal elements of the idea of knowledge.

This doctrine of identity has been maintained by the neo-realists. Neo-realism, as it has been expounded by Perry, Marvin, Holt, and others, is at the same time a consequence of pragmatism and a reaction against it. Neo-realism is a consequence of pragmatism because, as James has noticed, the pragmatist theory would not be understandable if there were not obstacles to human action, if there were not an external world of which we have to take account. But neo-realism is a reaction against pragmatism, particularly against the romantic elements of pragmatism, for it places much greater emphasis upon the logical aspects of reality.

One of the great merits of neo-realism has been to connect the problem of knowledge very closely with the problem of relations. Russell has shown that every idealistic theory implies the affirmation that when a thing is known, it becomes different from what it was before it was known. This affirmation, implicit in Leibnitz, became quite explicit with Kant. And it is this thesis that is challenged by Russell and the neo-realists. According to them, although there are some relations that transform the terms, or at least one of the terms, between which they hold, such as the relation of mother and daughter, there are other relations that, being more external, leave the terms as they were. (Let us say, to choose a rather arbitrary example, that the relation of uncle and nephew is of the latter type.) Thus, the question concerning knowledge would be whether it is a relation of the first or of the second type.

Naturally, this question is very difficult to answer. For the case of knowledge is unique. We can compare no other relation with what Perry has called the egocentric predicament. But at least we may say that there is no reason to believe that knowledge transforms the terms that are its objects. Indeed, we may even say that if knowledge transformed its objects, it would not be a knowledge of them. Consequently, if we wish to describe knowledge without destroying it, we have to say that it appears to be, and even that it is, a relation of the second kind. We have to deny completely the idealistic conception of a knowledge that transforms its objects.

The neo-realists assert that one term may be found in many different contexts, and it is in this manner that they provide a

rational foundation for the radical empiricism formulated by James and the theory of images formulated by Bergson

Yet, though realism solved many problems, some were left unsolved. It can easily be seen how truth can be attained according to the realistic theory of knowledge, but it is not so easy to see how it happens that there are illusions and mistakes. To deal with this problem another theory was developed, namely, critical realism.

But before we come to it, we must observe that realism, or more properly neo-realism, has taken many different forms. For example, the neo-realism of Montague is sometimes very near a physiological or even a materialistic theory. The new realism of Holt is also rather near materialism, its originality consists in its emphasis on the objectivity of our sensations, consciousness being only a kind of searchlight illuminating the different fields of experience.

Two philosophers have given to neo-realism a wider metaphysical scope—Alexander and Whitehead. One of the most important ideas of Alexander is that knowledge is not a unique relation in experience, but that it is rather a case of what he calls compresence, that is, when a fact of consciousness is simultaneous with a datum of experience, we say that the former knows the latter. So we see how the objectivity of the objects of thought is presupposed and maintained by Alexander.

Whitehead's theory may be said to be more dynamic in that he sees knowledge as prehension—the act by which we take hold of the object, but this act is no more a unique act than the compresence of Alexander is a unique state. Everything in the universe of Whitehead prehends every other thing.

In both these theories we see examples of what Sheldon has called the great objectivism, or what may also be called pan-objectivism. Everything weprehend, everything we are compresent with, is real. Thus, we again find ourselves, particularly if we accept the theory of Alexander, confronted with the problem of error. Knowledge has been explained in a rather satisfactory manner, but error, notwithstanding all Alexander's efforts, is not explained.

Critical realism, which developed nearly at the same time as neo-realism, may nevertheless be considered as a reaction against it. In a certain sense neo-realism is an epistemological monism, identifying thoughts and things. Critical realism, on the contrary, is definitely an epistemological dualism, separating thoughts and

things. It can even be called a trialism, since there are not only thoughts and things, but other entities that the critical realists call essences. To be sure, neo-realists like Russell and G. E. Moore also have a theory of essences, and Whitehead too has maintained the doctrine. But the problem of essence plays a greater role in critical realism, particularly as it is presented by Santayana and Strong. And here we see the difficulty of the theory. According to them, the mind has to choose some essences and set them upon objects. But how will it make the appropriate choice? In opposing neo-realism, which explained truth but not error, critical realism explains error, but not truth. It appears that the two doctrines must supplement each other, or perhaps the answer must be sought in another direction.

Although Husserl and the phenomenologists did not know the doctrines of neo-realism, we may regard their theory also as a reaction against it. Taking up again one of the doctrines of Berkeley, the neo-realists maintain that the fundamental error in the ordinary theories of knowledge is the thesis that an idea is an idea *of* something—for example, that the chair as an idea is the idea of the chair. According to Berkeley, many mistakes in philosophy come from this little word 'of.' The neo-realists agree with him, for they identify the thing with the thing as idea. Husserl and his followers, on the contrary, insist on what they call the intentionality of knowledge. For them, knowledge is always directed toward something different from itself. I am always in the presence of things, and it is the fact that I aim at them, as it were, that explains knowledge.

We may add that, like critical realism and some forms of neo-realism, phenomenology attaches great importance to essences. These as well as existences are objects of our knowledge. But the character of our knowledge as related to essences is different from its character as related to existences. Thus we see in Husserl, as in Russell and Santayana, a renaissance of Platonism.

Different strains of thought have contributed to the development of phenomenology. Brentano had insisted on the intentional character of thought, thereby emphasizing an idea that may be found earlier in some scholastic philosophers. Bolzano called attention to what he called 'propositions-in-themselves,' indicating in this way the possibility, and even the necessity, of that renaissance of Platonism we have mentioned, and Meinong, in isolating the content of

the affirmation, which he called 'the objective,' also contributed to the Platonic element that was to form a part of phenomenology.

This doctrine is at the same time an effort to describe the field of consciousness as it is in itself, thereby continuing the Platonic and Cartesian tradition, an effort to stress the activity of the mind in what the phenomenologists call the foundation of the acts of the mind, thereby continuing the Kantian tradition; and an effort to derive all this from an originary experience, thereby continuing the empiricist tradition.

One may wonder whether these are not conflicting tendencies, at least with regard to some points. If the originary experience is emphasized, how can we remain purely within the realm of consciousness? And in any case, is it not by an abstraction that the pure field of consciousness is said to be capable of being explored and described in its own right and that we can be said to maintain ourselves in this domain by bracketing the external world, in which, nevertheless, we so essentially are?

Yet the richness of the phenomenological analyses, particularly concerning what is called the pre-predicative stratum of our experience and its temporal character, constituted by perpetual acts of retention and protention, renders it one of the most illuminating doctrines of knowledge.

We have followed what might be called a kind of historical dialectics of modern realism, passing from the affirmation of the identity of thoughts and things to an affirmation of their differences, and uniting as closely as possible the affirmation of existences and the affirmation of essences.

What we have to remember particularly is the idea of compresence, which we found in Alexander and which we might add to the idea of the coincidence, the oneness of thoughts and things, which we found in the neo-realism of Perry and Holt. But now, to these two ideas of coincidence and compresence we have to add the idea of distance, which is implied in the idea of compresence. There is always a kind of distance between knowledge and its object. Knowledge is not its object, the former is always at some distance from the latter. And this idea of distance may to a certain extent explain the idea of intentionality affirmed by the phenomenologists.

We may now notice how diverse are the implications of the

different conceptions of knowledge, according as it is taken to be a kind of copying, a kind of imposition of forms, a coherence, or an identity. If knowledge is a kind of copying, this can be a copying of empirical objects (and then we have empiricism), or of intellectual objects (and then we have rationalism), or of relations (and then we have some forms of empiricism or rationalism more complex than the preceding ones, or we have relativism).⁷ If knowledge is the imposition of forms, we have the Kantian criticism. If it is coherence, we still have some aspects of Kantianism, though we find a more developed form of the coherence theory in the system of Hegel. As for knowledge as identity, this conception underlies not only the rationalistic system of Parmenides, but also the quite empiricist systems of some of the neo-realists. Nor is this all. We could also mention the theories based on essences, such as the theory of Plato and his more modern followers, and the conception of truth as fulfilment, which is the theory of Husserl (who understands by it, of course, an intellectual fulfilment), and finally we have to take account of the Bergsonian theory of intuition, in which we again find the affirmation of an identity, but now a moving and affective identity. So we see that the theories of knowledge imply different conceptions of the nature of knowledge itself.

They have for their consequences diverse affirmations concerning the value and the limits of knowledge; for, as we have seen, the empiricists and the rationalists may be called dogmatists, whereas the philosophers who tend toward relativism, such as Kant, Comte, and James, set some bounds to knowledge and limit its value. But it is very difficult to achieve a satisfactory classification. The absolutistic theory of Hegel and Bradley may be classified among the dogmatic or the relativist philosophies according to the stage of the system we are considering. Moreover, even rationalists admit that there are limits to our knowledge. Both Descartes and Leibnitz reserve absolute knowledge to God. Descartes denies to man the comprehension of the infinite, and Leibnitz denies to man the comprehension of the ultimate reason of things. More recently philosophers have gone beyond relativism and have developed new forms of dogmatism in the different theories of neo-realism, phenomenology, and intuitionism.

⁷ For Comte, for example, truth is the reproduction of external relations

This new dogmatism is characterized by a fuller comprehension of the importance of relations. To be sure, Plato, when he defined judgment and its activities, when he emphasized the importance of mathematical knowledge, when he saw otherness as essential to Being, already realized the significance of relations; and Descartes did too, when he said that among what he called simple natures were to be found propositions, that is, unions of subject and verb, or of verb and attribute. Leibnitz and Kant had also stressed the importance of relations. But for these last two philosophers, and particularly for Kant, relations are in a world apart, separated from the empirical world; whereas for James and his followers, the neo-realists, and for Bergson, relations form an integral part of reality.

Another respect in which at least some of the recent forms of the theory of knowledge may be distinguished from the preceding ones is in the importance of time, and particularly future time. It is from the point of view of time, as opposed to that of eternity so firmly taken by Plato and Spinoza, that the pragmatists interpret knowledge. According to them, as we have already seen, all the theories of knowledge that are founded on the idea of copying, and even on the idea of coherence, are theories that consider the truth from the point of view of the past: there is a pre-existing reality that we have to reproduce in our minds. With Kant a change is already noticeable, since, according to him, by knowing we create the object of our knowledge. In this sense it is quite right to speak of a Kantian revolution. Truth is really made by us. Pragmatism constitutes a second revolution: in Kant the creator of knowledge is man as a rational being (and to this extent at least the revolutionary Kant was in agreement with the long tradition of human wisdom); whereas the pragmatists abandon the concept of a rational human nature given once for all, and so push the revolution much farther.

After having considered the different theories concerning the nature of knowledge and its value and limits, let us turn to the different views that have been taken of its origin and its criterion. Concerning the origin of knowledge we again find, quite naturally, the opposition between empiricism and rationalism. But this opposition is not so clear-cut as it seems at first. Rationalists admit the importance of experience. We have only to read the *Phaedo* to see that we always start chronologically from experience, although we

possess ideas logically prior to experience. The same may be said for Descartes, who specifically asserts that the innate ideas are dispositions rather than actualities. On the other hand, empiricists such as Locke admit ideas that are independent of the particular facts of experience. And modern philosophers have taken account of both reason and experience, of both essence and existence, of both terms and relations. So that, although there is no progress, properly speaking, in philosophy, we may say nevertheless that we do find in recent philosophies a deeper respect for all sides of experience and a larger outlook.

As for the criterion of knowledge, it is evidence for both the rationalists and the empiricists—sensible evidence in the one case, intellectual evidence in the other. Here again Kant made a revolution because he criticized these two kinds of evidence: sensible evidence, because it does not provide the necessity and universality characteristic of knowledge, and intellectual evidence, because it is empty and insufficient. He therefore had to find another criterion, namely, the constitution of a coherent experience, and it is this criterion that was expanded by Hegel into a complete philosophy. But here too the pragmatists, completing the revolution of Kant, or rather making a counter-revolution, replace coherence by consequences (though one might consider the consequence as a particular case of coherence, that is, the coherence with future beneficent effects). And, after relativism, we find theories that go beyond relativism by means of the ideas of fulfilment (Husserl) and intuition (Bergson). Even if we are not wholly satisfied with these two theories, we must say that they are very revealing. They are the sign of an essential need of the human mind and perhaps of its very nature, which cannot be satisfied with relativism.

After the dominance of relativism and agnosticism at the end of the nineteenth century there came a period when philosophers manifested a desire to vindicate knowledge, to deny the Unknowable of Herbert Spencer and the unknowable thing-in-itself of Kant. We may find this tendency in the English pragmatist Schiller as well as in Bergson. In his first work, *The Riddle of the Sphinx*, Schiller emphasized the idea that nothing remains unknown to an audacious human soul. According to Bergson, we are in contact with the Absolute, and even more than in contact with it, every time we go deeply into the perception of ourselves. But it is not only by means

of this kind of intuition that the Absolute is reached. Pure perception, which is, it is true, only a limit, makes us 'coparticipant' with the whole of nature. The instinctive knowledge of animals makes them coparticipant, by a kind of sympathy, or even sometimes by antipathy, with what happens in other animals. So we find in Bergson as well as in the pragmatists and the phenomenologists a denial of the skepticism that had marked philosophical thought at the end of the nineteenth century. Bergson even goes so far as to say that in science, in mathematical physics, we touch the absolute of matter, just as in intuition we touch the absolute of mind, because matter and science are the product of the same movement; and here again we find a reaffirmation of the old idea that like knows like, an idea whose continued importance we have noted in the whole history of the theory of knowledge. Thus, according to Bergson, the whole world is open to some kind of knowledge, matter being known by physics, things by pure perception, living beings by instinct, and ourselves by intuition.

Finally, we have to take account of two philosophies that have given a new importance to elements that had been seen before, but not so clearly. For Kierkegaard, truth must not be separated from the subject affirming it. His theory is, of course, formulated with particular reference to the truths of religion, but it may be applied to other truths, especially moral truth. We have already considered theories that have been called great objectivism; we may call the theory of Kierkegaard great subjectivism even more appropriately than the theories of the romantic German philosophers to which Sheldon has applied the name. The consequence of Kierkegaard's theory is that we must not put existence and subjectivity on one side and knowledge on the other, real knowledge is subjective and existential. According to Kierkegaard, the tension of my being, when it is related to what is, for him, reality, is the criterion of truth. The how of knowledge constitutes its content (although we must not forget that, for Kierkegaard, it is his Christian beliefs that in fact provide the content).

But here too we find a kind of dialectics, for Heidegger, who in many ways may be regarded as a follower of Kierkegaard, maintains the complementary thesis that in knowledge reality reveals itself to us: truth is not something created, as modern relativism

maintains; it is, as the Greeks had felt, discovered. We have to unveil it. It was there; we had only to see it.

This passage of an idea to its contrary, this perpetual antithesis that appears in the reflections of man concerning knowledge, reveals the difficulty, and even the impossibility, of defining truth. We have seen knowledge conceived as identity, as compresence, as distance, as intentionality. But it always escapes our definition, so that we may say that knowledge itself cannot be known, at least not completely. Nevertheless, the idea of copying and the idea of consequences contribute important elements to our understanding, though in a rather rudimentary form.

As we have already seen, one way of solving the problem would be to apply different solutions to the different realms of reality. From this point of view, one might say, for example, that the Platonic and Cartesian theory is true for mathematics, the Kantian theory for physics, and the empiricist theory for our common-sense knowledge of the world. There is something right in this division of the solutions according to the realms of reality to which they are severally applicable. We might even speak, as Bergson does, of the knowledge provided by instinct, which gives us some inkling of a reality beneath the world of common sense, and of a knowledge by immediate sense perception, of which Bergson also speaks, and which is a kind of participation in the world, a communication with the world.

This idea of our being in the world, which has been stressed explicitly by Husserl and Heidegger, is certainly important as the basis for a theory of knowledge. We might compare it to Alexander's idea of compresence and to what the French poet Claudel has understood by the term *connaissance*. He defines it, rather arbitrarily it is true, as 'being born with.' It means for him our kinship with the world. This is what we probably have to find behind these copyings and consequences, these identities and distances, which we have mentioned.

Perhaps, then, philosophers were wrong in stressing so much in their theories of knowledge the activity of man. For this is only one of the two aspects of reality. There is not only activity, but also receptivity and passivity. Herbert Spencer is one of the philosophers who have seen that the world in a certain manner moulds the senses of man. The empiricists have taken note of this passivity in a

general way, but not very satisfactorily, because they represented it in a very thin and dry fashion.

Knowledge and truth are lived before they are thought. Perhaps it is by the experience of error that we come to an explicit understanding of the experience of truth, though the experience of truth is logically prior.

This would lead us to examine another question—not whether truth is prior in time to particular events, but what the constitution of truth itself is in its relation to time. We should find that truth in this regard has a rather complex structure, implying the three aspects of time, and two of them in particular—the past and the future.

In the same manner we might ponder the relations between knowledge and time. Plato, in speaking of reminiscence, saw very clearly the relation of knowledge to the past. The very term *a priori* has at least an apparent relation to time. We might follow the indications of Plato's statement that knowledge is always made possible by means of pre-existing conceptions. Hegel too stressed the connection of knowledge with the past in emphasizing the fact that we know events only when they have happened and that, to use his phrase, the owl of Minerva flies at night. And it is needless to cite again Bergson's theory of the retrospective character of knowledge.

But knowledge is also related to the future. In contending against the pragmatists of his time, Plato clarified the relation of truth to the future. And it is precisely the pragmatists of our time who have emphasized this relation, though in a quite different manner, in saying that knowledge is prospective.

The pragmatists on the one hand and the rationalists on the other have transformed into a kind of myth this relation of knowledge to the past and to the future.

Finally, knowledge is related to the present, or rather is the present in its relation to both past and future. The intentionality of which the phenomenologists have spoken is perhaps a manner of describing truth in the present as distinguished from the Platonic retrospection on the one hand and the pragmatic prospection on the other.

This triple relation of truth to the three aspects of time constitutes truth itself.

The theory of knowledge has been dominated by the distinction between form and matter, a distinction of which we see the beginning in the *Philebus* of Plato, the development in Aristotle, and some of the final consequences in Kant. But is this distinction quite legitimate? *Gestalt* psychology warns us that we cannot distinguish between matter and form, that in a certain sense things always have form, and that it is not the mind which imposes form on them. Thus, *Gestalt* psychology gives us indications tending in the same direction as some of those we find in Whitehead.

Another remark we can make and which has already been made by Whitehead is that the sense according to which the theories of knowledge have been constituted is the sense of sight; and we have only to read Plato, St. Augustine, Aquinas, and Descartes to appreciate the importance of light in their comparisons and examples. But, as the French philosopher Maine de Biran has said, the sense of touch has a kind of priority. It is to this sense that Whitehead alludes when he speaks of causal efficacy. Philosophers like Scheler and Alexander also continue the tradition of Maine de Biran (and Berkeley).

So, little by little, we have come to an empiricism that has, much more than the traditional empiricism, the feeling of totality, of relations, of inner experience, of activity.

Knowledge may be understood either as analysis or as synthesis. A philosopher like Condillac emphasizes analysis but has a clear consciousness that his analysis is the possibility of a synthesis. For Kant, knowledge is synthesis. For Hobbes, Descartes, and Leibnitz, it is both analysis and synthesis. But what is synthesized or analyzed? We must always have something upon which analysis and synthesis can operate. We might call it the given. Mediate knowledge presupposes immediate knowledge. If there is knowledge, there is something that is known; at least on this point the phenomenologists and a dialectical materialist like Lenin agree.

Aristotle said that a being, when it knows something, is that which it knows. But one can say as well that a being is not that which it knows. There is always a distance between being and knowing.

But if there is distance and difference, there is also kinship and acquaintance, and it is on this fact that such different thinkers as Russell, Alexander, Claudel, and Bergson have insisted.

Moreover, as Heidegger has shown, knowledge is not separated from existence; it is one of the fundamental characteristics of human existence. For man, to be is to think. But here thinking is not taken in the impersonal, rational sense of Descartes, it is rather an active */*projection of myself into the future. And this knowledge is only the fact that I become conscious of something that was before in the obscure regions of my being. Knowledge is founded on something deeper than knowledge.

The question always remains how these different qualities of knowledge—presence and distance, projection and retrospection—can go together? And how can we explain the fact that the object of knowledge has both a transcendent character and an immanence in ourselves at the same time? This can be explained only by the fact that words are but words, that the real cannot be completely expressed. We always come in the end to the point where, having distinguished objects and subjects, we see that there are no longer objects or subjects. Bradley thinks that it is after and beyond our experience that we find unity. But we should say that we find it before experience, that this fusion is the immediate givenness from which we start. And even Bradley would acknowledge this point, for he speaks of the unity of the feeling which is for him the center of experience.

So we come to a kind of metaphysical mysticism. It is not so different from what Plato arrives at in the sixth book of the *Republic*, in the *Phaedrus*, and in the *Symposium*. Using the metaphors of light that we have noticed, Plotinus wrote: "To see and to have seen that vision is to reason no longer."

What we must do is finally to place ourselves at the point where knowledge and truth vanish and give way to reality. It is useful in this regard to remember the distinction Bradley has made between truth and reality. Truth always implies a separation between the subject and the object, and the separation between the subject of a proposition and the attributes of the subject. But in the last analysis, truth has to be founded on that something that Bradley calls feeling or experience and that Russell calls acquaintance. Then we are beyond the distinction between subject and object. We are in that oneness which is reality.

But, having said this, we must also say that the separation is necessary and that we have to maintain the idea of truth, however

obscure it may seem if we probe into it too deeply, and we have to describe it in the most faithful manner possible. In other words, we must not only define it prospectively by its consequences, as the pragmatists have done, but see it as a product of our retrospection as well. If we think of a truth, we think of it as being in the past, or rather in that representation of the past which has sometimes been called eternity. We have to take account of all the elements we have mentioned—oneness and distance, copying and consequences, coherence and the shaping of new forms, the future and the past. Finally, we have to go to the feeling of deep compresence. And even if, with all these terms, we cannot define our idea of truth completely, we may at least devote ourselves to it, fight for it; if it is undefinable, we still have the feeling of its sacredness. Truth, by which all things may one day be defined, for this very reason cannot itself be defined. It is the motif of our research; it is its own end and can always be the object of our pursuit, though we know that its nature cannot be circumscribed.

If, instead of considering the problem of knowledge, we had examined the problem of consciousness, which we might call the subjective aspect of the same problem, we should have come to a similar conclusion.

Socrates, in opposition to the preceding philosophers and to the Sophists of his own day, turned the mind of man toward his own consciousness. We may also find in the precepts of the Stoics an insistence on the consciousness of man as distinguished from any external event. Whereas Socrates and the Stoics insisted primarily on the moral consciousness, St. Augustine emphasized the religious consciousness, the consciousness of man in his relation to God.

It is with Descartes that we have a whole philosophy based on a conception of consciousness. For him ideas are what is present immediately to our thought. This is the immediacy of consciousness; and although Descartes kept the Platonic conception of eternal Ideas innate in the mind (more, as we have seen, in the form of dispositions than in the form of ready-made concepts), we may say that consciousness has a greater role in Descartes than it had in Plato.⁸

⁸ Although in the *Theaetetus* Plato stresses the activity of reflection and comparison necessary for the acquisition of knowledge.

In the three great followers of Descartes we find three different developments, each one important for the history of the concept of consciousness. Spinoza conceives consciousness as consciousness of itself—what he calls the idea of idea; and, on the other hand, he holds that the soul is consciousness of the body. Thus, consciousness is always linked in Spinoza with the intellectual object of consciousness on the one hand and what could be called the bodily object of consciousness on the other. Malebranche's conception of consciousness is opposed to that of Descartes in one important respect. Whereas for Descartes, consciousness is what we know most obviously and easily, for Malebranche, on the contrary, the phenomena of consciousness are those most hidden from us. God has chosen to reveal external phenomena to us and to conceal from us our own internal phenomena in a kind of darkness. On the other hand, in a truly Cartesian spirit, Malebranche insists on the impossibility of explaining the modalities of our soul in terms of what happens in our bodies. Leibnitz opposes the Cartesian view of the complete separation between thought and what is not thought with the idea that between consciousness and matter there are an infinite number of kinds of diminishing consciousness and that at the bottom of matter itself we find life and souls. In ourselves, beneath the conscious perceptions that are clear and distinct, there are many small perceptions, confused and nearly imperceptible except by their fusion with other perceptions. Thus, Spinoza, by the relation he established between consciousness and its object; Malebranche, by plunging into the darkness of the soul what was most obvious for Descartes; and Leibnitz, by his insistence on the small and nearly unconscious perceptions, all widened the theory of Descartes.

As for Kant, we may consider him on the one hand as an heir of the Cartesian tradition, in so far as his affirmation of the 'I think' corresponds to the Cartesian *cogito*, but on the other hand, he denies that our knowledge of inner phenomena is prior to our knowledge of external phenomena; for the forms of time and space prevent man from seeing himself as a thing-in-itself, just as they keep him from seeing other things as things-in-themselves.

So, according to Kant, we cannot pass from the empirical consciousness to the transcendental consciousness, and we can affirm this transcendental consciousness only by turning our attention to the conditions of our knowledge. Nevertheless, there is a means of

reaching the things-in-themselves. This is evidently not possible for the empirical consciousness, nor even for the transcendental consciousness, since this activity has to be directed always toward experience; but we may attain a knowledge of things-in-themselves by means of our moral consciousness. Here Kant takes up again what had been taught by Socrates, Plato, and even Descartes when he completed his theoretical philosophy by an ethics founded on generosity. According to Kant, the pure practical reason is an essential aspect of the same reason of which the pure theoretical reason is another aspect; so that there is a scale of consciousness which includes, over and above the empirical consciousness, the transcendental consciousness and the moral consciousness.

Maine de Biran sees consciousness as revealed by its action on something other than itself—first the body, the organic term to which the hyperorganic force of consciousness is linked; then the external world. In consciousness itself he points to a whole series of perceptions, some more obscure, others more clear, and in this respect follows the indications of Leibnitz and also of such empirical philosophers as Cabanis.

Taine, while attacking Maine de Biran and those who claimed to be his followers, tries to prove that the perceptions of which we are conscious are only the results of physiological and ultimately physical movements.

These different tendencies continued during the nineteenth century, and we find them again, though transformed in many ways, in Bergson on the one hand and in Freud on the other. There are, in fact, many assertions common to Bergson and Freud, for example, the idea that many of our representations are driven back into the unconscious either by the necessities of action or by the necessities of society. But there are also differences, Bergson being the successor of Maine de Biran, and Freud rather the successor of some of the masters of Taine.

For Bergson, consciousness is connected with the possibility the human being has of selecting stimulations, and this possibility is in its turn connected with his faculty of choosing different modes of action. The same idea of selectivity appears in the neo-realistic theory of Holt, who sees consciousness as a searchlight illuminating by turns the different aspects of the real. This idea is completed in the theory of Bergson by the affirmation that psychic events are

differentiated from physical events by the fact that the former have a greater tension or condensation, that is, different movements or elementary vibrations that are stretched along a rather extended length of time in the physical world are concentrated and condensed in the psychical world. So consciousness is at the same time the selection of external circumstances and stimulations and the condensation of those very circumstances and stimulations that have become its elements.

Two tendencies are noticeable in contemporary philosophical speculation concerning consciousness. Some philosophers have pointed to the specific character of consciousness, for Husserl, for example, consciousness is a quite unique activity defined by its orientation toward objects, by what he calls intentionality. According to philosophers like Alexander and Whitehead, on the contrary, one has to assimilate consciousness as much as possible to the other events of the world. For Alexander, consciousness is a case of compresence; for Whitehead, who conceives it in a more dynamic manner, in accordance with his whole scheme of philosophy, consciousness is a case of prehension. But these two tendencies are perhaps not so much opposed as would appear at first, because Husserl does not consider the world in its entirety and methodologically limits himself to the consideration of knowledge. There may be a case where compresence and prehension present themselves with the character of intentionality, which is perhaps inherent in everything and is simply more evident in them. We may notice also that the term 'compresence' does not necessarily mean that there is not something specific in consciousness; Alexander tells us that he uses the term to designate the simultaneous presence of two elements of which one is conscious, so that the particularity of the psychic element is not denied by his theory. Thus we could say that in contemporary philosophy knowledge is statically compresence, dynamically prehension, and epistemologically intentionality.

From this idea of intentionality we can go with Heidegger (and even before him Husserl had seen it very clearly) to the idea of 'being in the world.' Our consciousness is not separated from the world. But, we must add, as Sartre has seen, that it presents itself to itself as at some distance from the world. Consciousness is always distance at the same time that it is presence. In fact, it is a kind of 'absence in presence' or 'presence in absence.' This idea of absence,

and even the idea of presence, implies, according to Sartre, the idea of negativity. Here he finds himself in agreement with Hegel, and we could say that he replaces the Heideggerian theory of Nothingness by the Hegelian theory of negativity. Consciousness is doubly negative, according to Sartre: it is negative in its relation to itself, because it is always other than it is (to use his expression, it is what it is not, and it is not what it is), and on the other hand, it is negative in its relation to other things, because it affirms itself as not being these things. Nevertheless, it is essentially related to them; following the indications of Husserl and Heidegger, he describes consciousness, strikingly as well as truthfully, as the 'slippery slope on which one cannot be without being thrown out toward other things.' Defining consciousness as what is 'for itself,' he is led to the affirmation that the 'for itself' is outside itself. Another peculiar feature of his theory is that consciousness, i.e. the 'for itself,' is a kind of diminution or shrinking of the 'in itself.' But this last affirmation, as well as the place given to Not-Being, belongs to rather questionable, ambiguous, and highly metaphysical aspects of Sartre's theory.

So, reviewing these contemporary theories of consciousness, we see that sometimes they insist on the transcendence of the object of consciousness in its relation to consciousness, as is the case for critical realism and phenomenology and the doctrine of Alexander, and sometimes on the immanence of this very relation, as is the case for neo-realism and before it William James, when he spoke of the transparency of consciousness. In other words, sometimes they insist on distance, sometimes on presence; sometimes on intentionality, sometimes on compresence.

It is also noteworthy that in Bergson's theory we find both the idea of selection and the idea of condensation.

Thus we see that consciousness is always defined by antitheses. We might add to the preceding ones the antithesis between activity and passivity. Certainly there is a tendency in James, for example, and in the neo-realists to insist on the passivity of consciousness, a tendency that was not felt or not strongly felt before recent times.

It would be possible to complement the thoughts of the philosophers on this subject by some indications from writers like Claudel, Proust, and Valéry. On certain points we might compare the theory of Claudel with that of Alexander: consciousness is essentially compresence with things, a kind of dense knowledge; and on the

other hand, we are not far from the idea of 'being in the world.' For Valéry the most interesting phenomena happen when consciousness is just emerging from unconsciousness, elaborating the products that have been first given to the unconscious. The same tendency may be found in Proust. According to him, consciousness is most faithful when it is tinged with, or rather made of, affectivity. On the other hand, there is what Proust calls the intermittent character of consciousness. my consciousness of this moment is not necessarily related to the consciousness of the preceding moment but may be related to my consciousness of moments that are separated from it by long stretches of time, just as tonight's dream may be related to the dream of the other night and not to some thoughts of today.

The problem of consciousness remains a problem, but we may say that the idea has been analyzed into the different ideas we have mentioned. selection, condensation, compresence and transparency, distance, transcendence, and intentionality.

The problem of knowledge is closely related to the problem of language. This is particularly apparent in the question of the status of general ideas.

Protagoras, when he denied every universal truth and said that there are only particular sensations and that judgments are always individual, may be considered as the first nominalist. However, the problem of nominalism and realism was explored with particular thoroughness in the controversies of the Middle Ages. In modern philosophy Hobbes may be said to continue and to bring to its extreme formulation the nominalistic thesis that general ideas are only words. But it is notable that difficulties arise in the philosophy of Hobbes from the fact that at the same time that he is a nominalist he believes in deduction. The bond between nominalism and empiricism disappeared with Locke, who believed, up to a certain point at least, in general ideas, but it was reaffirmed by Berkeley. According to Berkeley, the deficiencies of philosophers come from the use of general ideas that correspond to nothing, such as the ideas of Being and matter. But here also a difficulty arises. General ideas are, for Berkeley, only particular ideas seen from a certain point of view. To have the general idea of a triangle is to be aware of the possibility of replacing one particular form of triangle by another without changing the content of our proposition. The general idea

is the possibility of representing many other ideas of the same kind by means of a single idea. However, it can be readily seen that such expressions as 'same,' 'kind,' et cetera imply precisely that element of generality that Berkeley tried to exclude. In the last phase of his philosophy Berkeley was led, perhaps by some considerations analogous to those we have adduced, to replace his extreme nominalism by a kind of realism—the affirmation of the reality of Platonic Ideas.

Here we come upon a general difficulty of nominalism. It is well illustrated by the French psychologist and philosopher Taine, when, after having excluded general ideas from the mind, he places them in the things themselves under the form of species, kinds, forms, and fundamental characters.

Opposed to nominalism is the realism of the rationalists like Plato and Descartes. Although not liking what he called the universals of the dialecticians, Descartes thought nevertheless that there are in the mind universal ideas like those of mathematical figures. In the same manner Leibnitz maintained that general ideas are irreducible to particular events.

Nominalism, when it is consistent, denies the presence of universals both in our thoughts and in things, realism affirms their presence in both; and conceptualism denies that there are universals in things but maintains that these universals may be conceived by thought. The struggle of these doctrines against one another might continue without end. However, on this point Bergson has made an observation that may be of some interest. According to him, general ideas do not come from particular ideas, nor do particular ideas presuppose general ideas; both these kinds of ideas are derived, simultaneously but by different processes, from something prior to them that is not an idea, but rather an attitude, a mode of action, a form of behavior. The herbivorous animal, for example, has practically, biologically, what might be called at a later stage of evolution a general idea of a herb. It acts in the presence of all herbs in a specific manner without differentiating among them, though differentiating them, as edible, from all other things. It is from this primitive attitude that general ideas and particular ideas have been developed along a single line of evolution.

As to the question concerning the relative value of universals and particulars, two possible solutions are open to our choice. One may,

with the Platonists, stress the value of the universals and see in man essentially the being who is able to discover the permanences and the generalities amidst the flux of events. One may also choose the other possibility and emphasize the value of particularities and partialities. Thus, James says that the most precious things are always particular things; and we remember too what Blake has said about the minute particulars.

We now turn from the problem of general ideas to the problem of language. As we have seen, language and reason are from the beginning closely united. And today in some places semantics is attempting to replace philosophy.

To be sure, it is very difficult completely to separate purely linguistic from purely philosophical questions. Some philosophers, particularly Hegel, have made wonderful use of language, i.e. of the implications of words, in developing their systems. (In this respect we might compare him with Baader and the poet Claudel)

But as early as in the *Cratylus*, though in a rather crude form, Plato criticized the use philosophers make of language. He shows there that both the Heracliteans and the Parmenideans can prove their opposite theses simply by resorting to etymology.

Probably the first task of the philosopher is to distinguish the various uses of language: there is a descriptive use; a poetical use, in which the sounds of the words themselves matter much more than their dictionary 'meanings'; and there is a designative use, to which philosophers have not paid enough attention. Here language is only a reference to a reality one designates. This is the case, as we have seen, for the here and the now, on the analysis of which Plato and Hegel have founded parts of their theory. They seem not to have observed that these adverbs have a meaning only by reference to a reality that they designate, and so both philosophers condemn them because they apply to different realities at different moments. But, as we have already noted, there is no deficiency in this linguistic usage, since at every moment we can designate the realities these words are meant not to express, but to indicate.

What we have said about the separation of the problem of the origin of knowledge and the problem of its nature makes it possible for us now to treat the problem of truth independently of the question of empiricism and rationalism.

We have already discussed the problem of truth because real knowledge is knowledge of truth. The two questions are necessarily interconnected, since a false knowledge is not knowledge.

But there is another idea which, since the beginning of philosophy, has been connected with the idea of truth, namely, the idea of Being.⁹ We have only to remember what Parmenides said about truth in his poem on Being. The relation between these two ideas has been kept in the systems of Plato and Descartes and indeed in all the classical rationalists.

However, before saying anything on this subject, let us recall another observation of Plato, who shows that truth, as well as error, which is the contrary of truth, is possible only in judgments. It is particularly in the *Theaetetus* and in the *Sophist* that Plato gives expression to the idea that truth is a matter of reflection, comparison, and pondering.

If we now take the final result of many logical theories as it is presented in Bradley, we shall see that judgment itself presupposes the division that we make in reality between the subject and the attribute (the predicate of the judgment). So we see clearly the distinction between truth, which is in judgment, and reality, about which there is judgment.

But this distinction needs to be complemented by the affirmation that truth is something felt and experienced before it is thought. And we may perhaps go still farther and say that the experience of truth is first a negative one, that truth is first manifested in its contrary, that is, in error. When the thinking being becomes aware of the mistake he has made, by that very fact he becomes aware of something that is truth. Truth has been experienced unconsciously before becoming truth for a consciousness.

In this context we are reminded of Nietzsche's statement that truth is a figment of the human mind.¹⁰ From what we have said it can readily be seen that truth is indeed in one sense at least a figment because it implies the separation emphasized by Bradley between the subject and the predicate; but on the other hand, we

⁹ We may note that the Greek word for 'is' means at the same time 'is true'.

¹⁰ It is a very striking fact that the same man who so strongly criticized the idea of truth, identifying it finally with illusion, was devoted to the pursuit of that very truth he criticized. This applies at least to the middle period of his career as a philosopher.

have seen also that truth is the expression of a real experience of the living and thinking being.

The classical philosophers tended too much to restrict the notion of truth to the one realm of the understanding. Against their conceptions we might invoke the testimony of Kierkegaard, who defines truth as the subjective, meaning by this term the tension of the whole individual in the presence of the object of his passionate thought.

But again our reflection cannot stop here. The fact that Heidegger has defined truth as being the object itself as revealed to the human mind induces us to believe that all is not said in the formula: truth is subjectivity. This must be complemented by the formula: truth is objectivity.

In fact one of the difficulties of the problem of truth is that there are probably many kinds of truth and that for each kind a separate theory would be necessary. It might be said finally that, as the Scholastics have seen, truth is a transcendental idea which has only a unity of analogy, since it is different according as it is applied to different realms.

Let us observe, nevertheless, that the two extreme theories we have opposed to each other are not so contrary as they at first appear. Kierkegaard says that truth is subjectivity, but it is only in its relation to something different from itself that subjectivity may be felt with intensity. For Kierkegaard, truth is also relation, although he emphasizes only one of the terms of the relation. But the other term, we might say the hidden term, which for Kierkegaard is the Absolute Other, God, is not less important. And, on the other hand, Heidegger knows very well that, although truth as he defines it, according to his understanding of Greek etymology, is the revealing of a hidden thing, this revelation can occur only if there is a being who reveals and a being to whom the thing is revealed.

So we come again to the idea that truth is a relation, but this idea in its turn leads us to another, namely, the affirmation that there is a reality in relation to which truth is truth but which is itself beyond relations.

We have already mentioned the difficulty of this problem of truth. Is there a truth about truth? We have also seen the difficulty arising from the multiplicity of truths. And, in addition to these difficulties, we encounter certain dangers. If we think too much

about truth, we risk making the idea of truth vanish. Yet we have to maintain it. Just as Plato in the *Parmenides*, after having shown all the difficulties that beset the theory of Ideas, says that this theory must be maintained at any price, so we shall say that the idea of truth, of accurate and precise truth, has to be maintained at all costs, even though it is surrounded on every side by the obscurities of Being.

We have to remain always in the light of the idea of truth. Here again we find a tension, analogous to that of which Kierkegaard has spoken, a tension within the idea of truth itself.

This tension may be translated into practice. For truth is often linked to courage, as lying is to cowardice.

But if this tension has to be translated into practice, we may say on the other hand that it comes from practice. We need no general theory about truth in order to see that only if we do this or that deed shall we be true to ourselves. On the contrary, it is from the observation of our own spontaneous reactions in very specific cases that we conclude that truth is and is *there*. And here we find a new aspect of the idea of truth: truth is fidelity to ourselves and to the real.

The philosopher has to exercise some courage when he questions the very idea of truth from which his courage originates and toward which it is directed.

WITH Hegel, and then with Bradley, Bergson, and Russell, philosophy attained a clearer consciousness of the opposition between the mediate and the immediate. However, this opposition was implicit in every great doctrine from the very beginning.

Philosophy is in itself a questioning of the value of the immediate. Since the time of Xenophanes, doubt about appearances has been one of the prime motives of philosophical speculation. For Plato, the immediate is a reflection, a mirroring, but not a completely passive mirroring, even what he called opinion implies a judgment, which is mediate. And the rationalistic philosophies kept at the same time this Platonic diffidence toward the immediate, the affirmation that the immediate is not so immediate as it appears, and the opposition to it of stable realities.

Indeed, it might be said that these stable realities are at least in one sense more immediate than the so-called immediate: the Ideas are logically prior to sensations. Descartes expressed the same thought even more explicitly. At the very outset of his philosophical reflection he destroyed the so-called immediate certainties of the senses in order to substitute for them the real immediate, which is thought. By thought, he wrote, 'I understand what we conceive 'immediately by itself.' The *cogito* is at the same time and for the same reasons immediate and instantaneous.

More generally, according to the rationalistic systems, what is first, what is immediate, is the perfect. We know we are imperfect because we have in us, prior to all our experiences, the idea of the perfect. In this sense rationalism replaces the sensible immediate by a rational immediate.

So we see that what could have appeared at first as an opposition

between the mediate and the immediate is in the philosophies of Plato and Descartes an opposition between two immediates. We might even say that the rational immediacies are, according to them, much more immediate than the sensible ones.

Of course, this is not the case for an empiricist like Locke. For him, the immediate is the impression a thing makes on the mind, although at the end of his treatise he does acknowledge that we have an immediate perception of rational relations. But it is characteristic of his empiricism, as well as of the empiricism of Condillac, that all our ideas are reduced to elements that are sensations. This whole trend of thought, which in part has its origin in the philosophy of Hobbes, finds one of its most complete expressions in the work of Taine. However, paradoxically, and yet quite naturally, Taine as well as Herbert Spencer has to analyze our sensations to their elementary components, which are invisible movements in the body, so that this philosophy of the immediate ends in the affirmation of something which is not immediate at all.

Berkeley could be considered as a much more logical partisan of the immediate. He sought always to remain very near immediacy. It is true that in his first work he tried to show that our perception of distance is not so immediate as it seems, that it constitutes a kind of language by which the data of one sense are translated into another. But on the whole his identification of things with our ideas of them, as well as his thesis that we apprehend ourselves by what he called a notion, is an affirmation of immediacy.

We find in religious thinkers such as Pascal and Fénelon in the seventeenth century another kind of philosophy of the immediate, founded on what Pascal called *le cœur*. According to him, *le cœur* feels the principles of mathematics as well as the truths of religion. He opposed the rationalistic type of thinking he found in Descartes.

So far we have not encountered real philosophies of the mediate. But we may find one in Kant. According to him, the *cogito* does not have the immediacy Descartes attributed to it, and the perfect, which was ultimately the first idea for Descartes, is, according to Kant, not even a legitimate idea. There remain only unknown things, which would be immediate if we could know them; since we cannot, we are imprisoned in a realm of universal mediation. It is only through the practical reason that we may come into rela-

tion with the thing-in-itself which is at the root of our being; but this is a postulated immediate rather than a given one.

Hegel interpreted the philosophy of Kant as the sign of a kind of divided consciousness. But he continued Kant's struggle against the immediate. Hegel is *par excellence* the philosopher of the mediate. According to him, thought moves in such a manner that it describes circles that are ultimately comprehended in one great circle. He tried to cancel the Kantian dualism between form and matter and to constitute a philosophy of the mediate that would not be a philosophy of division.

Hegel criticized not only the abstract immediate, which would be the idea of Being—a very poor idea, according to him, since it is really the idea of Nothing—but also the apparently more concrete immediate of the here, the now, and the ego, which are, he believed, not concrete at all, but very general, and indeed of the emptiest generality, since they can be applied to every place, to every moment, to every person.

The conclusion of these reflections is that the mediate is not secondary, is not less certain, in fact is not less immediate than the immediate itself. The truth is in the perfect union of the mediate and the immediate in what Hegel called the Idea, and the whole of his *Logic* and his *Phenomenology of Mind* is the history of the human mind in its transition from dispersed appearances to the one rational whole in which everything is comprehended. In this manner Hegel united the classical conception of the work of art and of the world as wholes with a romantic conception of history over which he triumphed by integrating it into this rational whole.

Philosophy has not stopped at this magnificent doctrine of the mediate. Even in the time of Hegel, Maine de Biran, in agreement with Fichte on certain points, called attention to the 'primitive fact' of consciousness, which is human will as it is given immediately to us in the perception of our effort.

An even more explicit vindication of the immediate may be found in Kierkegaard and later in James and Bergson. Kierkegaard and James struggled against Hegel; Bergson, against Kant and Spencer.

The here, the now, and the ego, which had been so unimportant for Hegel, were all-important for Kierkegaard. The individual exists face to face with the individual God: I am unique and God is unique. The whole of Hegel's disquisition on the generality of the

ego, the here, and the now is just talk, founded on the necessary generality of our manner of speech. Moreover, the incarnation of God signifies, according to Kierkegaard, that the here and the now of the life of God on earth have been consecrated. So religion raises its voice against rational philosophies, and Jesus, as mediator, destroys the Hegelian mediation.

James's criticism of Hegel consists particularly in the protest of the individual as free and responsible against the optimistic totality of the System.

As for Bergson, the title of his first work, *The Immediate Data of Consciousness*, shows that what he wished to find was what is primordially given. According to him, the immediate is self-justified, whereas everything mediate, on the contrary, is only a partial view of reality. We are always involved in contradictions when we remain in the realm of the mediate; the immediate destroys all contradictions.

In these philosophers we see a kind of romantic revolt of the immediate against the classical philosophies—against both the rational immediate and the Hegelian mediate.

It must first be observed that the problem with which we are confronted is a little obscured by the fact that the term 'mediate' is positive and the term 'immediate,' which ought to be positive—at least from the point of view of the partisans of the immediate—is in fact negative. Moreover, these two opposite ideas necessarily imply each other; at the same time that they negate each other, they presuppose each other. We may notice also that all the philosophies we have analyzed include some mediate and some immediate elements. Some immediacy is posited even in Kant, and some mediacy even in Berkeley.

Finally, it should be noted that there are many kinds of immediacy. In Aristotle, for example, we find the affirmation of the immediacy of this or that individual man, such as Socrates, and (since generally, if we meet Socrates, we first see that we meet a man and only then that it is Socrates), the affirmation of man in general, and the affirmation of the principles of reason.

Accordingly, a philosophy may be considered as either a philosophy of the immediate or a philosophy of the mediate, depending on the point of view we choose. Let us take Descartes as an example.

It is true that he reaches God by reasoning. Yet this reasoning presupposes an illumination of the soul by the idea of God, so that reasoning, that is, mediate inference, presupposes intuition, that is, immediacy.

Therefore, the classification of philosophies into those of the immediate and those of the mediate would be very difficult to make. Nevertheless, we may say that philosophies like those of Aristotle, Kant, and Hegel are philosophies of the mediate. The first two are based on discourse and reasoning; the last may be called, in opposition to them, a philosophy that advances in circles and leaves behind it the straight line of deduction or analysis. As for the philosophies of the immediate, they may be of the sensible immediate or of the intelligible immediate. If they are philosophies of the sensible immediate, they will or may finally end in a kind of materialism, which is not so immediate as it appears at first, or in a kind of sensualism tending toward idealism, and thus we again find ourselves drawn toward a philosophy that implies an element of mediacy.

This leads us to believe that immediacy is very hard to attain and that, paradoxically, the immediate is not given, but sought, aimed at, or striven for. Distance and transcendence—which are, in fact, two names for the same thing—hinder the immediate from being given, we might even say from being immediate. There is a distance between myself and my preceding self, and there is a transcendence that separates the object of my reflection from myself.

Indeed, we may say that there are acts of mediation and acts of 'immediation' rather than that there are mediacies and immediacies. I am always accomplishing acts of immediation when I assemble in one act of thought many different elementary acts. For example, perception and reading are such acts of immediation. Reasoning and analysis, on the contrary, are even more obviously acts of mediation. A continual interchange is therefore possible between the mediate and the immediate, for they are both constituted by these acts of the mind; and it is in this sense that the Hegelian theory of the union of the mediate and the immediate takes all its meaning.

Each one of these terms has its particular value. Some writers on art, such as Vernon Lee and the French cubist Gleize, have called attention to the element of time implied in our contemplation

of the works of the primitive painters, which involves something like a reading of their paintings in successive moments. On the other hand, as we have said, to contemplate or enjoy a work of art is to see it in its simultaneous totality.

The conflict and the union of the mediate and the immediate may be seen also in the fact that we have in art as well as in life two possible ideals—the one of richness and of a kind of wealth of associations, the other of originality, of purity, even of poverty.

The ideal would be to unite these two ideals. This union might also be conceived as a union of two different kinds of the immediate—the immediate of appearance, which might be called the superficial immediate, on the one hand, and the profound immediate on the other. Nietzsche tried to remain faithful to appearances, finding in them a greater depth than the illusory depth of an imagined world behind the world of phenomena. This idea is comparable to that expressed by Kierkegaard when he speaks of the matured or second immediate, that is, the immediate one attains after one has passed through religious experience.

Thus, we always return to the idea that with the immediate we can make something mediate and *vice versa*. But we have to go a little farther. Since we never apprehend the immediate, we may say that the real immediate is something prior to what is immediate for us—something like the primordial impression anterior to our impressions. And we can go even farther and feel the presence in what Bradley called the finite center, that is, the background of our being, of something that is the basis of all our vision and comprehension and that is beyond the distinction between subject and object.

Nevertheless, we have to maintain, even if it prove only a myth, the idea of the immediate, that paradise lost which we must try to regain.

Even if we cannot regain it, even if we end, as some philosophers believe, in a kind of shipwreck and failure, we have to reaffirm this inaccessible ideal. Such is man's situation, characterized by distance and transcendence, by that unceasing transformation into each other of the mediate and the immediate. Such too is philosophy. Man is a philosopher, that is, somebody who seeks the mediation of wisdom in order to return to the world.

To be sure, the immediate has meaning only by virtue of its

opposition to the mediate, and this is to say that its idea is mediate. Do we not, therefore, have to go beyond this opposition, which remains in the sphere of reflection? It is here that a concept like that of existence as it has been recently interpreted manifests its value, at least as a sign of this 'beyond.' The immediate as well as the mediate are inferior to something else of which we have no consciousness. After having affirmed the immediate, and then after having asserted it to be a myth, we have to go beyond it at the same time that we go beyond the mediate.

From the opposition between the mediate and the immediate, we can pass to the opposition between the abstract and the concrete. Probably the first time that this opposition was emphasized was when Aristotle criticized the theory of Plato as being too abstract. According to Aristotle, the mathematical Ideas are abstracted from reality, what is real is the composite of form and matter that is the concrete individual—Socrates, for example.

Aristotle would agree with Plato that the particular events of experience—this or that color, this or that sound—are fleeting. Plato had said that we cannot even apply a name to such fugitive events, we cannot even say that they are this or that. Aristotle would not deny this, but he contended that there is, nevertheless, some stability in the living individual. In fact, he was able to find in Plato, particularly in the *Philebus*, indications tending in the same direction.

We shall not follow the discussion between the partisans of the abstract and the partisans of the concrete. The whole controversy is obscured by the fact that the partisans of the abstract think that they are the real partisans of the concrete. This idea, which was already implied in the arguments of Plato, was brought to particular prominence by Hegel in his criticism of the empiricist theories. For Hegel, the concrete is the whole, and though there are many relative wholes, there is only one absolute whole, which is the Idea, that is, the fully developed totality of the world.

This very insistence of Hegel on the Concrete Universal, as he called it, resulted in a reaction on the part of those who thought of such a totality as a pure abstraction.

Here is a conflict between philosophers like Plato (as he is ordinarily interpreted), Descartes, Spinoza, Malebranche, the He-

gelians, Hamelin, and Bradley on one side, and Hobbes, Hume, Kierkegaard, and Bergson on the other. As for Aristotle and Leibnitz, they cannot be easily classified in either one of the groups we have mentioned, although they are not partisans of the concrete in the sense of the empiricists or the Bergsonians, neither are they partisans of the abstractions conceived by Plato, as he is ordinarily understood, or by Spinoza.

It can be easily seen from what metaphors these two terms 'abstract' and 'concrete' are derived. To abstract is to draw a part from a whole, the concrete is the ensemble of the properties belonging to the whole when all the parts are united with one another. It can also be easily seen that the term 'concrete' is not quite satisfactory in this sense, because it seems to imply that things which are first separated are afterwards grouped together. But the true partisans of the concrete are precisely those who would say that the concrete is prior to any of the separations or abstractions which are made from it. It is noteworthy that among the philosophers we have named as partisans of the concrete, most are rather partisans of the particular. Hume, for example, separates things into their elements. Except for some parts of his doctrine, like those about nature and about habit or custom, he is as abstract, we might say, as Descartes. The nominalism of Hobbes is also of a very abstract kind. Kierkegaard and Bergson, by different ways, come nearer to the concrete as we understand it, the one by the intensity of his subjectivism, the other by his affirmation that the immediate is prior and that wholes are given to us by inner experience.

A theory of the concrete could be constituted in part under the influence of Hegel and his feeling for the whole, and of Bradley and his conception of a felt totality, and in part under the influence of James, Bergson, and Whitehead. This theory would affirm that what is given is not parts outside parts, but felt wholes and feeling wholes.

One of the characteristic features of the philosophy of the future will probably be its insistence on the concrete, conceived as a totality in the sense in which Hegel conceived it, but, in opposition to Hegel, as an empirical totality. Thus, it will be opposed both to the rationalists and the empiricists, for the latter insist rather on the particular, and the former on the universal.

We have said that the word 'concrete' is not entirely satisfactory

because it presupposes a kind of synthesis supervening upon separate elements. Whitehead has coined the word 'conrescence' to connote the contemporaneous growing of the different elements, which, indeed, by virtue of their very intermingling and mutual involvement, cannot even be called elements. This word indicates very well the interfusion of things and their contemporaneous growth.

Gestalt psychology contributes to the same tendency, since it shows how totalities are given in perception itself.

Summing up the conclusions of this chapter, we may say that the abstract is mediate and the concrete immediate, and also that mediation ordinarily implies abstraction. So, once again, while valuing the Hegelian concern with the concrete, we find ourselves nevertheless opposed to the Hegelian conception of it. We conceive a concrete that is given in and by experience and that is the product of its own conrescence, and not of the development of a unique Idea pervading the whole.

XI Science, Philosophy, and the Sensible World

WHAT is the value of science? Before we can answer this question, we must first render these two terms, 'value' and 'science,' a little more definite. By 'science' we shall understand particularly physics, of which mathematics is the instrument and the language. Thus, mathematics will be considered as a method of science rather than as a science in itself. As for the social sciences, we shall leave them out of consideration here.

By science man tries to explain how things happen. What is explanation?

From the time of ancient Greece the idea of explanation has been related to the idea of reason or cause. It is noteworthy in this connection that the idea of explication implies a kind of unfolding. From the phenomenon man extracts, in a certain sense, the reason for it.

As we have already pointed out in the chapter on causality, the idea of cause has been replaced by the idea of function and relation. It is true that some students of the logic of science, following Meyerson, have said that science is essentially the pursuit of unity and identity. To be sure, the human mind does take a certain satisfaction in discovering identities. Yet science is the quest for relations rather than the quest for identities. The aim of science is to constitute a network of relations rather than to find an identical ground underneath everything.

As for the idea of value, this has been conceived in many ways. There is a great multiplicity of values. Science has a value of harmony and beauty on which Poincaré has insisted and which was present even in the old Pythagorean speculations. There is a grandiose beauty in some scientific hypotheses. Nevertheless, we

must not forget the assault that Keats made on science, nor the imprecations of Blake: Newton has broken the beauty of the rainbow; Urizen breaks the unity of things.

From the point of view of utility, we may be allowed to hope that the advantages of science will outweigh its disadvantages. When modern science began, Bacon and Descartes placed great emphasis on its utility, while others like Malebranche and Spinoza, and later Poincaré, said that the importance of science lies not so much in its use as in its intrinsic worth.

We are thus led to a third possible definition of its value. According to Socrates and Plato, science has a value in itself. Plato extolled the science that is pure contemplation in opposition to the science that may help to teach us how to play musical instruments or to number the stars. He wanted us to study science in order to attain not physical but metaphysical realities. We may oppose to this opinion of Plato that of Epicurus, who believed that only useful knowledge is legitimate, and, in fact, even the opinion of Plato himself when he expressed the desire to base every human practice upon knowledge or science.

The diversity of these opinions leads us to ask what the value of science is from the point of view of truth. Plato reproached the special sciences with being too closely connected with the particular. Aristotle, on the other hand, reproached the mathematicians with being too abstract in some of their speculations. Pascal pointed out that the principles and presuppositions of science are undefinable and undemonstrable. Kant explained the success of science by describing the structure of the human mind. Comte emphasized the idea of relation—the relation of science to the human mind and the relation of things to one another. But the criticism of the sciences that developed at the end of the nineteenth century with Mach, Pearson, Poincaré, Milhaud, Le Roy, and Duhem, and which was continued by Eddington, Whitehead, and De Broglie, rendered questionable the theories of Comte and Kant. It was shown, first for mathematics and then for physics, that a diversity of hypotheses is possible and that by abstraction science constitutes closed systems in order to discover precise laws. It was even suggested that these laws may be the products of many irregularities without any law, which compensate one another by virtue of their very irregularity. More recent discoveries have shown that one cannot render more

accurate a description of some of the characteristics of moving bodies without impairing the accuracy of the measurement of other qualities. This is known as the Heisenberg principle of indeterminacy.

Let us consider, then, the importance of science to the development of philosophy. The history of science is closely connected with the history of philosophy. We have only to recall the *Meno* and the *Theaetetus* to see that the discovery of some of the truths of mathematics by the Pythagoreans was one of the origins of Plato's theory of Ideas and also that the crisis brought about by the discovery of the irrational numbers was probably one of the causes for the profound transformations Plato later had to make in this very theory. The science of Galileo and of his contemporaries was one of the foundations of Descartes' philosophy. The doctrine of Leibnitz cannot be understood if one does not take into account the differential calculus. Without the influence of Newton we could understand neither Hume's attempt to discover in the sphere of the mind something analogous to attraction in the sphere of the body nor Kant's attempt to find a rational basis for the discoveries of Newton. But in surveying the history of the influence of science upon the development of philosophy, we must note one fact that differentiates what happened in the nineteenth and the twentieth centuries from what had happened before. Science then became critical of itself. Maxwell not only used conflicting hypotheses but knew that they were conflicting. This was only the beginning of the movement that has had its fulfilment in the recent theories we have mentioned, according to which science cannot describe with complete precision the whole of reality but always has to make a choice between, for example, a precise determination of velocity and a precise determination of position, because both are not attainable at once. Moreover, today, even more than in the time of Maxwell, contradictory hypotheses are used and even declared complementary to each other. Thus, when philosophers nowadays criticize science, this criticism is not necessarily an expression of their preference for irrationality; it is fundamentally a faithfulness to the very spirit of science, which has come to aim at the utmost precision and at the same time to know that at some points the utmost precision is unattainable.

Sometimes the results of science have been used to confirm

certain philosophical ideas, or rather to confirm their denial and rejection. Thus, the Kantian theory of space has apparently been refuted by the constitution of the non-Euclidean geometries, and the universal validity of the principle of causality seems to have been put in question by modern physics. So we acknowledge a value for philosophy in the conclusions of science. But it must not be forgotten that these conclusions have to be interpreted in a negative rather than a positive manner. Moreover, the Heisenberg principle of indeterminacy, though it means the abandonment of the principle of pure determinism, should not be construed as implying that freedom exists.

The problem of Plato was, in part at least, to see how mathematical science is possible, and the solution he offered was first the theory of Ideas, later the theory of the world as constituted by the action of the limit on the unlimited, and later still the theory of numbers. With these theories he also attempted to solve the problem of the constitution of physical science—at least the imperfect science of his day. Descartes had to face the same problems, but in clearer and more distinct terms; and his answer was, as we have seen, that extension is a clear and distinct idea. Kant too had to deal with the same problem, but now rendered both more precise and more complicated by the intervening development of Newtonian physics, and his answer was his theory of forms and categories. Now, after Einstein, Planck, Bohr, and Heisenberg, the problem is to see not only how science is possible, but how it is that science cannot go beyond certain limits. We have to consider the world as amenable and at the same time as resistant at some point to scientific interpretation. Science constrains us to see this dual character of the world: its amenability to reason and its at least provisional elusion of complete intellectual determination.

Yet science gives us some truth about things, though it be only about what we might call their infra-structure or skeleton. Thus, science, which is a kind of superstructure of the mind, reveals to us, as we have already said, the infra-structure of the real.

But, as we have remarked, in the nineteenth and the twentieth centuries science detected indeterminacies and mutually canceling chances in reality itself and saw that this infra-structure is not so fixed and static as had been previously imagined. We are, to be sure,

in the presence of a skeleton, but a soft and moving skeleton, as it were.

However, even if we take account of this last reservation, we must still add that the more closely we come to life, the less things are susceptible of description in scientifically precise terms—a fact already brought to light by Cournot and emphasized by Boutroux, Ward, and Bergson.

When the scientist observes things, he takes a non-human point of vantage, and so the truth of science could be said to be a truth for a being who is, in regard to his senses, a little, or in certain cases very much, superior to the rest of us. This observation allows us to maintain the reality of the sensible world, since it is the world at the level at which we are situated.

What we have said does not constitute a criticism of science, but only defines its place. It must be kept in mind that if a too rudimentary belief in science is dangerous, it is still more dangerous, by indiscriminate criticism of the sciences, to pave the way for irrational beliefs.

Philosophy has often been conceived as an effort on the part of man to liberate himself from the sensible. But perhaps it also has to be conceived as man's effort to liberate himself from this very liberation, which may be only apparent and has often been an imprisonment in the 'congealed lake' of idealism.

Let us first briefly mention the liberation from the sensible effected by Parmenides, Plato, Democritus, and Descartes. All these philosophers criticized our ordinary view of the world and replaced it first by the One, then by the Ideas, then by the atoms, and then by extension.

But there have always been some philosophers who have protested against this elimination of the sensible. Aristotle, for example, maintained against Plato the reality of the composite of matter and form. Leibnitz maintained against Descartes that extension is not sufficient to define the concept of body and that the concept of force must be added. Against the mediations of science Berkeley maintained the immediacy of common sense. Thus, even in two rationalistic and 'idealistic' philosophers, Aristotle and Leibnitz, we can see the beginnings of a philosophical realism. We might even find suggestions of realism in the idealistic theory of Kant; for when he said

that appearances presuppose things that appear and when he maintained that we cannot have a consciousness of ourselves if we do not first have a consciousness of the external world, he was positing the foundations of a realistic theory. Reid, in opposition to idealism, said that we have an immediate, and indeed a kind of magical, intuition of the external world. Maine de Biran, when he affirmed that in our feeling of effort we come into contact with the resisting external world, also contributed, though in a different manner, to the development of a new realism.

This realism has found one of its formulations in the works of Bergson. At the beginning of *Matter and Memory* he places us in the midst of images and asserts that seeing an object is placing ourselves in the object. He thereby gives a new form to our feeling of the immanence of perception. We may find analogous ideas in James, in the neo-realists, and in the neutral monism of Bertrand Russell, for they all say that the thing of which we have an idea and the idea we have of the thing are in fact one and the same term viewed merely in different contexts.

Their theory was based, as we have seen, on the affirmation that some relations may come and go without bringing about any change in the terms between which they hold and that knowledge is such a relation. But to this theory of the independence of terms with respect to their relations, such philosophers as Alexander and Whitehead have added another and seemingly contrary thesis. Whitehead in particular conceives knowledge as a relation that does not allow the terms to remain uninfluenced by it. We see here once again the dialectics of realism, which may also be seen in the fact that neo-realism has been accompanied by critical realism.

We may find another form of realism in the Russian philosophers Lossky and Frank. Their realism is a mystical and magical one founded on a feeling of the unity of the world.

Very much opposed to this mystical realism is the materialistic realism of Lenin. In his work against empirio-criticism, Lenin is even more of a realist than he is a materialist. His great adversary is Berkeley.

The realism of Nicolai Hartmann is influenced by the philosophy of Husserl and also by some of the ideas of Frank. In accordance with the theory of phenomenology, Hartmann maintains that when

there is knowledge, there is always a transcendent something that is the object of knowledge.

The realism of Heidegger, if we can call his philosophy realism (and he would question such an appellation), is tinged with his idea of 'being in the world.' Here we no longer find the classical distinction between subject and object which was present in nearly every one of the realistic philosophies we have named except those of Berkeley and Bergson.

To complete this enumeration of realistic philosophies we may mention the Thomistic realism of Gilson and Maritain in France and the structural realism of Ruyer, the last being not without resemblance to the philosophy of Alexander. The important point to be stressed is that with philosophers as different as Bergson and Russell, Lossky and Lenin, Alexander and Heidegger, or Hartmann, a new aspect of realism has emerged.

What do the terms of the problem of the reality of the sensible world mean? Is this a question about the sensible reality of the sensible world or about the intelligible reality of the sensible world? Evidently it is only if we mean the former that we can give an affirmative answer to the question whether the sensible world is real. There are different levels of reality, and on the sensible level the sensible world is real. Every truth is relative to a certain level of reality. For example, some dark lines on a white paper may appear to a fly like a series of mountains and valleys, to a child, like a series of syllables to be spelled out, and to an adult reader, as a part of a sentence. Every one of these appearances is true at its level. Similarly, the color red is at one level of reality a sum of vibrations, but at another level it is also this unanalyzable red here and now.

In the order of reality, vibrations are situated on a lower plane than perceptions, whereas in the order of knowledge, vibrations are situated on a higher plane because they are more difficult to know. Science, as we have noted, is comprehension of the infra-perceptual reality by a knowledge which is supra-perceptual.

Moreover, it must be observed that the sensible world is our world. The problem is: if I were not here, would this sensible world exist? But to try to answer this question is to try to extract from the relation of knowledge one term that is essential to it. This is like

asking what becomes of what is given if the one to whom it is given vanishes. To such a question we can make no answer; but we are not therefore constrained to conclude that idealism is true. This situation is what has been called by Perry the egocentric predicament.

The foregoing reflections are founded on the idea of the internality of the terms in relations. But now we have to start from another position—which has been considered by Russell, by James in some passages, and by Perry as essential to realism—namely, that from which terms are viewed as external in regard to their relations. From the egocentric predicament we can be led neither to idealism, as Perry has noticed, nor to realism. But we can be led to accept the possibility of realism if we believe in the independence of the terms in regard to their relations. In order to affirm not only the possibility but also the reality of knowledge, we should have to be sure that in the case of knowledge the terms are independent.

It is true that the more thorough our knowledge of the external world is, the more it tends to make us deny this externality, for we see more and more the interconnection of every term in the universe with every other term.

Thus, if the state of the theories of knowledge, at least of the realistic ones, leads us to the affirmation of the principle of externality, the state of physics would lead us rather to accept the principle of internality, and this is probably one of the reasons why the latter principle has been affirmed with so much emphasis in the works of Whitehead.

Probably we should have to admit the coexistence of these two principles in a manner that is mysterious to us.

It is rather remarkable that the two theories we have tried to examine—the one based on internality, the other on externality; the one a theory of immanence, the other a theory of transcendence—end in the same denial of dualism. The first leads us to a qualitative monism made of heteromorphous data—the world of Whitehead and sometimes of James; the second theory leads us to a kind of neutral monism, such as we find in Perry, in Holt, sometimes in James, and in Bergson's theory of images. Alexander has tried, by means of his theory of emergence, to reconcile the points of view of internality and externality. But, without having recourse to such

an expedient, James and Whitehead have in fact accepted in their theories both these different points of view.

In the philosophy of Berkeley the same denial of dualism that we find in more recent philosophies rendered necessary the affirmation of God, because for him ideas are always in a mind. But in these more recent theories the idea of the self has relinquished its pre-eminent place, and, as James has noticed, consciousness has ceased to be so important an entity and indeed is conceived no longer as an entity at all, but rather as a relation.

We must not imagine that realism is an easy doctrine. Always divided between a theory of immanence and a theory of transcendence, it has no stable equilibrium, it goes from one aspect of the real to the other. But this is because it wishes to be true to the real and because there is no reason why our relational and intellectual schemes should completely express reality or exhaust its richness. So sometimes realism insists on the intentionality of what is in ourselves, directing itself toward things, and sometimes on the identity between things and what is in ourselves.

Even if science should one day succeed in making us understand completely the mechanism of perception, we may question whether it will ever completely clear up the mystery.

There is a mystery, but is there really a problem? From the moment when we pose the problem it appears as insoluble. But if we take account of the realm that is prior to problems and in which we primarily are—in which we believe in the existence of the external world, in which we have that animal faith that Santayana speaks of, that sense of being rooted in things, which is at the same time a knowledge of things—we see that knowledge as participation in and communion with the world is a reality and that man is characterized by this very participation and communion.

There was a weakness in the classical types of empiricism and realism: they left to idealism the privilege and prestige of high and difficult thought. But, in fact, empiricism and realism are also capable of taking high metaphysical forms. When Kant said that being is that which is posited, he probably provided the starting-point for the positive philosophy of Schelling and for what we might call the higher empiricism. There is a transcendental empiricism (the empiricism of Schelling) that seeks to show the con-

ditions, let us not say of the possibility, but of the reality of experience. There is the radical empiricism of James, which welcomes the relations as well as the terms. There is even the possibility of a realism of essences like that of Moore, Russell, Husserl, and Santayana. There is, as in the Bergsonian and Schelerian philosophies, an affective realism. Transcendental, radical, non-intellectual (for nearly all these different forms of empiricism may be united in a single doctrine), this empiricism would be very different from that of the textbooks. It would allow us to unite tendencies of philosophers as different as Pascal, Schelling, and Hume, Scheler, Boutroux, and Russell, Bergson, Nietzsche, and Rauh, Whitehead and Heidegger.

Such an empiricism would be related to a criticism of the idea of possibility, to an affirmation of the reality of the contingent and of the contingency of the necessary. The primacy of the modality of reality, which was ignored by some of the philosophers of existence, but not by Kant, would be one of the tenets of this philosophy. Founded in part on inner observation, it would try to constitute existential theories of space and time in which time would be felt as expectation, yearning, fear, regret, and remorse. On the other hand, it would hold that time and space are only fictions; what exists are things before, things after, things at the same time. It is from things, in fact from the world—from things juxtaposed and postposed and anteposed—that the ideas of time and space are derived.

And thus we should be led to realism. There is no reflection except upon what is not reflection, no consciousness but of the unconscious. Before I think, there is always something—that which I think. *I think; therefore something is thought* is as true as *I think; therefore I am*; and that which was thought about existed before it was thought.

Moreover, the sense organs are not only formed by mind but also moulded by objects. Let us say with Plato that the eye is sunlike, and this empiricism will agree with Plato's thought that light formed it. But, interpreting Plato in a quite non-Platonic way, we must add, as we have said, that matter forms the form before form informs matter. Thus, we are very near to what Alexander calls emergence and what Whitehead calls concrescence.

Novalis has spoken of a magical idealism. Following a tradition

that comes through Albertus Magnus and the Arabs from Plato, even more than from Aristotle, he has deeply united magic and idealism. But it is not less legitimate to construct a magical realism, and Reid dimly knew this when he spoke of the magic of perception.

No doubt these two terms, idealism and realism, are far from satisfactory; and we might say rather, as Novalis himself would have said, that extreme idealism and extreme realism coincide, or perhaps that we have to place ourselves beyond, and even beneath, both realism and idealism, and to live denying all 'isms,' which are only views—views of something that cannot be viewed.

THE Greek word *Physis*, for Nature, and the Latin word *natura* mean the same thing: the power of growth, which is the essence of a thing and makes it be what it is. Both words, but particularly the Greek one, allude to something dynamic. In Plato, however, the term *physis* gradually came to signify something like the essence of a thing as he conceived it. The primordial meaning of the word was then nearly forgotten by Plato and replaced by a more static conception.

Lucretius in his poem on Nature represented it as completely independent of the gods, but as subject nevertheless to the laws of Fate. The Christian conception, on the contrary, represented nature as established by the will of God. This is the conception of Descartes, who deduced the laws of nature from the properties of God. In fact, the term 'law' was applied to nature precisely because it was conceived as a kind of great society of which God is the legislator.

Spinoza, in whose philosophy so many influences commingle, preferred to Descartes' conception of nature the idea of certain thinkers of the Renaissance that in nature there are no laws established from the outside by God: God is nature and Nature is God. Nevertheless, according to Spinoza, we have to make a distinction between Nature as creative (*natura naturans*)—and this is precisely what God is—and nature as created (*natura naturata*), i.e. what is ordinarily understood as nature. In the system of Spinoza both are only two aspects of reality, the one more active, the other more passive, and, of course, the more active aspect is the more real one. This theory had the advantage of allowing Spinoza to be at the same time a mechanistic philosopher in his explanation of particular

things and a 'God-intoxicated' philosopher in his view of the whole universe.

In the eighteenth century Leibnitz demonstrated the harmony between the world of nature, which is ruled by the principles of mechanics, and the world of Grace, which is ruled by the principle of finality. Here God was conceived as the co-ordinator as well as the legislator of the universe. Later, Nature was regarded as benevolent, as it had already been by Montaigne. We find this idea of the benevolence of Nature in many philosophers of the eighteenth century. It is present, for example, in Hume, whose skepticism is tempered by the affirmation that Nature arranges things in such a manner that we need not regret not knowing what we do not know. The conception of the benevolence of Nature reached its culmination in Rousseau, who again took up the old opposition that the Greek Sophists had made between convention and Nature. For Rousseau, everything that proceeds from the hand of Nature is good.

Other philosophers of the same period, such as d'Holbach in his *Système de la Nature*, developed a materialistic conception of nature.

Although Kant was much influenced at first by Leibnitz and then later by Hume and Rousseau, he was opposed to all three philosophers in holding that there is evil in nature. As we have seen, on this point Kant's philosophy was tinged by his Pietistic convictions. This idea that evil has a positive existence posed many problems and led Kant to deny the rational conception of Leibnitz, the affective conception of Rousseau, and (at least for the physical world) the postulated confidence of Hume.

These different conceptions of nature continued to struggle against one another during the nineteenth century. Fichte saw in nature only a kind of matter for our moral consciousness; Schelling conceived it as one of the two terms that constitute the Absolute, the other term being mind; Hegel thought of it as a phase in the development of mind; and Schopenhauer, in opposition to all these philosophers, taught us to see in nature only a kind of delusion produced by what Descartes would have called the *malin génie*. Nietzsche in his turn opposed Schopenhauer and the other philosophers we have named, seeing in their theories the expression of the same need of discovering a world behind the world of appearances, whereas reality is for him only in appearances as they reveal them-

selves to us. So we arrive at a complete naturalism, very different from that mixture of rationalism and romanticism we find in the post-Kantians, but a naturalism that yet retains a considerable element of romanticism while rejecting rationalism completely.

To this romantic naturalism we may oppose the romantic supernaturalism of Kierkegaard and James, who are not satisfied with the ordinary conceptions of nature and ask, as Pascal did, for the possibility of miracles.

Here again, then, we find our brief history of philosophy ending in antitheses.

Another doctrine, one that would perhaps transcend both naturalism and supernaturalism, is that of Bergson, who is not so far from the doctrine of Schelling or of Schopenhauer but has a greater confidence in nature than the latter. According to Bergson, things are abstractions, and reality consists in life and persons. But for the moment we shall not go so far as to affirm anything like this. We have to see events, as Whitehead says, in their different forms. We shall then find ourselves in the presence of three realms: things, living beings, and persons.

We might come to the same conclusion if we consider the idea of order.

Anaximander is the first philosopher to make a pronouncement, remarkable but rather confusing, about order. He said that every element—earth, air, fire, and water—strives to trespass upon the domain of every other, but that each in its turn is punished. It is in this mythological form that the idea of order is first presented. We then find it in the philosophy of Parmenides, according to whom all things are bound by the strong chains of necessity, and of Heraclitus, who depicts the rising and the setting of the sun and all the phenomena of the universe as determined by *Logos* or reason. In Plato order is assured by the action of the Demiurge on the mechanical web of Destiny. For Descartes, order assumes a methodological value: we have to construct an order even when we do not find it given in nature; and one of the principal rules of his method is always to proceed regularly, i.e. according to order, when passing from idea to idea. Spinoza explains the order of our thoughts and of things as the expression of creative Nature or God: the order and connection of things is the same as the order and connection of

thoughts because both things and thoughts are modes of God's being. Leibnitz defines order as the union of harmony and richness. In Kant we see here, as in other matters, a kind of reversal of the terms of the problem. No doubt one could find suggestions of such a reversal in Plato, Descartes, or Leibnitz, but Kant certainly had a clearer and more general awareness of the problem when he declared that order is not found in things, but imposed upon them by the human mind. The philosophies of Comte and Cournot are dominated by the idea of order. Comte's aim was the union of progress and order. Cournot insisted on the orderliness of nature, but showed at the same time that this orderliness may be demonstrated by a method which is itself founded on probability and that the order of nature is richer and more complex than the rationalists have ordinarily conceived it. With Poincaré the examination and criticism of the idea of order initiated by Cournot was continued, and order was conceived as a product of probability and, as we have already seen, was explained as the outcome of the mutual compensations of chance events. For Bergson there is no general idea of order, but there are two kinds of order, the mechanistic and the vital, the first arising from an interruption in the second.

One ought probably to distinguish many kinds of order. Even in mathematics one has to distinguish the cardinal and the ordinal numbers. And, as Bergson has shown, there is no general problem of order, but particular problems of particular orders. So again we are in the presence of different realms of reality with their different kinds of order. We have already distinguished the realm of things, the realm of living beings, and the realm of persons.

The Greek word for 'thing' is *pragma*, which means something made by man. As we have already had occasion to observe, reflection upon works of art and fabricated, man-made things had a great influence on the development of philosophy. It was one of the starting points of the theory of Ideas, and it is by a kind of paradox which is not very easily understandable that Plato denied in the last part of his philosophical career that there are Ideas of man-made things. In fact, even in the last books of the *Republic* he still used as an example the idea of a fabricated thing, e.g. the idea of a bed.

For Plato things are like the intersections of Ideas (although we must remember that in the *Philebus* he speaks of essences generated amid the flux of the sensible and thus strives to give a place to things in his system). For Democritus, on the contrary, things are conjunctions of atoms.

Aristotle had the feeling that neither of these doctrines rendered full justice to our conception of things, and so he formulated his theory of things as wholes constituted by form and matter—a theory that remained predominant in most of the philosophers of the Middle Ages.

But against this conception of Aristotle, Descartes maintained that particular things are only appearances, behind the secondary qualities, which are fleeting and ultimately illusory, he found reality only in the mathematical concept of extension. To be sure, he still had to take account of one particular thing, if it may be called a thing, namely, the living being to whom appearances appear and who conceives the clear and distinct ideas; and in some passages Descartes even advocates our placing ourselves at the common-sense level and then seeing things as they are seen in ordinary life. But the main trend of Cartesianism is toward a denial of the existence of particular things in favor of the universal mathematical extension. We find the same conception in Spinoza. Though he too recognizes the need of giving some consideration to the human body, of which the soul is the idea, yet, according to him, the higher we go in our ascent toward final truth, the more the particular modes vanish in the light of eternity and perfect universality.

Just as Aristotle had struggled against certain aspects of Platonism, so Leibnitz opposed some elements of Cartesianism and, reverting sometimes to Aristotle, maintained that there are in the universe individual forces, substantial links, and well-founded phenomena.

With Kant a shift was effected in the formulation of the problem as it had been put by Descartes and Leibnitz. Things were maintained only as particular substances and causes constituted by the mind as a first step in experience, which is completed only when all things are interconnected in the whole of experience.

Another shift of emphasis was effected by Hegel, who more clearly than any of his predecessors depicted the movement of the mind, affirming things as substances under their qualities, then affirming things as identical with their qualities, and then in a

following movement denying the existence of things in order to pass to a deeper consideration of reality.

The affirmation of the existence of things, which was only a moment in the development of mind, according to Hegel, became something important in itself for certain realists, phenomenologists, and poets.

The idealist philosopher Bradley, in calling attention to the separation the mind makes between the *that* (the subject of a judgment) and the *what* (its qualities), had already continued the Hegelian analysis of the concept of the things in relation to its qualities. Going even farther back, we may see in what Kant called the transcendental object something like our image of the thing. And we may notice in passing that for Kant the concept of the thing-in-itself represented something analogous to what is, according to us, the basis of our concept of things. On the other hand, some psychologists such as the Viennese Jerusalem have maintained that our idea of a thing is formed on the model of our active self: it is by a mode of transference and projection that we imagine in things a kind of center analogous to the one we feel in our own personality.

However, as we have said, it is in a realist philosopher like Russell that we find an analysis of the thing as the sequence of its appearances. And we find the same idea, in a different form, in the phenomenology of Husserl, who defines things as 'giving themselves' always in successive perspectives. What is lacking, perhaps, in these analyses of Russell and Husserl is the element of *thatness* to which Bradley has called attention and of transcendental-objectness emphasized by Kant and interpreted by Jerusalem as arising from a projection of ourselves.

We may also find in the poetry of Rilke (partly under the influence of Rodin) an effort to express that element of closed individuality which appears in things, and in some of the prose works of Valéry a kind of surprise in the presence of things as products of haphazard movements of the sea or of the earth. More recently, Sartre has emphasized what he calls the absurd aspect of things, their monstrous multiplicity; but this seems rather near a kind of pathological experience from which Sartre later succeeded in freeing himself.

What is important in this context is to take account of the different

levels of experience. Plato, Descartes, and Spinoza tell us that at the level of the highest science, things disappear. But if man is not naturally always at the level of his own highest science, it is natural that around man, who may be defined as a centered being, or even as a self-centering being, there should appear things that also seem self-centered. And this is what happens on the level of our naive perception, where there are no flat images, but rather dense little worlds, each of which constitutes a thing.

Thus, our naive perception gives us the idea that there are objects that present to us now one and now another of their aspects, but at the same time we have the feeling that these objects have a kind of inwardness which is closed to us.

Our realism is thus not a homogeneous realism for which everything is on one plane—for example, the plane of extension. On the contrary, there are many concretes, by force of nature coalesced and concretized; and these are what we call things. We pass from the visual immediacy criticized by Whitehead toward something deeper.

May we not recall here the *Dinggedicht* of Rilke and Husserl's attempt to define things, as much as they can be defined, in terms of the multiplicity of their aspects? Things, he says, are never given except in aspects and perspectives. They give and do not give themselves. Never before have things been better conceived in their variegated perspectives as well as in their opacity and ultimate invisibility. They are both immanent and transcendent, or rather elude these qualifications altogether. Far from being causes of nausea or disgust, they reveal themselves (and are revealed by artists and by ourselves in our highest moments) as still-lives, as ecstatic causes of ecstasy.

Mythology had peopled the world with living forces, and the first philosophers remained faithful to this vision: Thales said that the world is full of gods, and Anaximander represented it as governed by forces that keep it within its limits.

For Plato meditation upon the phenomena of life did not have the importance it had for Aristotle, whose whole conception of substance, and above all of causality, was influenced by his reflections upon the generation of living beings. His theory of the passing of matter into Act under the influence of form (which is Act) was

borrowed from the observation of the production of the living being, which is born of the conjunction of Potency and Act under the influence of form. Indeed, Aristotle considered the whole world as separated into kinds, so that all explanation is a mode of classification whereby things are arranged according to their kind in the same manner as animals are classified according to their species. Moreover, Aristotle distinguished different types of souls. There is not only the intellectual soul, but also a soul that governs the movements of the body and another that directs its nutrition, and under these souls there is a soul of the organs and a vegetative soul.

The idea that the universe is itself an enormous living animal, which had been suggested by the pre-Socratic philosophers, was developed in the Renaissance and given many varied forms. It came to the Renaissance philosophers in part from the Stoics and in part from the Neo-Platonists.

The philosophy of Descartes was a reaction against both this Renaissance conception and the system of Aristotle. First Descartes did away with all those kinds of souls that are not rational souls: for Descartes, the one attribute of the soul is thinking. Furthermore, at the point in his system at which he established the nature of the soul he did not yet claim to know that the body exists; consequently, he could not attribute to the soul, at least in his second meditation, any influence on the body, whose existence he had not yet affirmed. Moreover, as we have seen, he left to matter only the attribute of extension, just as he left to the soul only the function of thinking. Thus he banished from philosophy the consideration of final causes, which had been so important in Aristotle, and left room only for mechanism. As for life, he did not classify it as a spiritual property at all; and as there are only spiritual and material things, it must fall into the part of the world that is material. Hence Descartes' thesis of the *animaux machines*: animals are completely on the level of matter.

On this point too Leibnitz reacted against Cartesianism, maintaining that the universe is full of life, that final causes may be legitimately invoked, that between the human soul and matter there is an infinite continuity of spiritual beings (not so fully perfected as man, yet still spiritual), and finally that the substance of every being is force and energy.

In the last of his Critiques, the *Critique of Judgment*, Kant examined the phenomena of life together with the work of art and saw in both the product of a kind of spontaneous imagination hidden in the depths of man's nature. What characterizes life for Kant is its purposiveness—not a purposiveness directed toward something else, but the reciprocal purposiveness which organizes the whole of a living being. It is not astonishing that Goethe was particularly attracted by the ideas of Kant on this point.

Although Kant saw very clearly the irreducibility of the phenomena of life, he limited his affirmations by referring them always to our faculty of judgment, i.e. our own manner of considering the facts. Other philosophers and scientists have not imposed such a limit on their affirmations; and at the end of the eighteenth century, both before and after Kant, there developed a movement that has been called vitalism, involving the affirmation of a specific life force. In fact, this movement could be traced all the way back to the medical schools of the Renaissance and even further.

These vitalistic tendencies may be found in many forms of European romanticism. A characteristic feature of romanticism is the doctrine that history is not reducible to a series of logical developments and that organisms are not explainable in terms of mechanistic forces.

In philosophy a more moderate form of vitalism was maintained by Cournot, who saw in life something that escapes completely rational explanations, and by Boutroux who, in describing the different levels of reality from pure logic to mind and God, reserved a particular place for the phenomena of life with their relative indeterminateness and their character of concrete totality. In fact, on this point Boutroux, though an anti-positivist, found himself in agreement with Comte, who affirmed that phenomena of a higher level cannot be reduced to phenomena of a lower level.

The philosophy of Bergson may be considered as the triumph of these vitalistic tendencies. As early as in his first work he mentioned certain feelings in us that grow and have their own duration. But it was in his third book, *Creative Evolution*, that he presented his theory of life. According to Bergson, life eludes mechanistic explanations because they always separate things into elements, while life is a totality. He condemned the Spencerian explanations because they try to reconstruct life from arbitrarily chosen static

elements. But he also condemned the teleological explanations, which are no less arbitrary, no less intellectual, and no less static. Life transcends both these kinds of explanation and can be described only as an *élan*. From this point of view, the operations that according to other doctrines are the effect of a great multiplicity of causes are only the expression of the one effort of life, dividing itself in order to introduce itself into matter, but still remaining one. At the beginning of life there is a rich multiplicity of tendencies which separate themselves later into the vegetative realm, the animal realm, and the human realm. In this manner each one of these tendencies is at the same time necessary for the others and incomplete in itself. But there is the hope that the most precious characteristics of each of these tendencies will be reunited at the end by means of that union of instinct and intelligence which Bergson calls intuition.

Few philosophers have had like Bergson the audacity to trace the development of life in its entirety, at least few philosophers have attempted to do so in the contemporary period.¹

But two philosophers, Alexander and Whitehead, have achieved a conception of what life is in its very nature. Alexander, giving even greater scope to ideas that might have been found in the positivist Comte and the anti-positivist Boutroux, emphasized the fact that there is what he calls an emergence of new qualities that we may be able to explain as the effects of lower qualities, but which cannot be reduced to them; so that there is a whole hierarchy of beings, from bare space-time to life and ultimately to God, a hierarchy of which each grade is at the same time a product of the preceding one and something new in itself. For Whitehead there is no need for such an emergence, though he would probably not oppose it. According to him, there is life everywhere. Everywhere there are totalities and what he calls prehensions; and his philosophy has been rightly called a philosophy of the organism. From this point of view he is able to criticize the conceptions of Descartes, which had as their consequence a denial of the importance of life, even a negation of the concept of life, in favor of the two opposed concepts of soul and extension.

This brief history of the conceptions of life shows that it is par-

¹ We may except a booklet by Max Scheler

ticularly since the rise of romanticism that they have assumed a special importance, although one could find a similar emphasis on life in Heraclitus, who, on etymological grounds, compared it to an arrow, or in John, who referred to Jesus as life, or later in Leibnitz. In fact, there are not only romantic but also religious connotations in our idea of life—a point that has been clearly demonstrated by Leisegang in his *Forms of Thought*. We find them even in such a philosopher as Hegel in the romantic beginnings of his thought as well as in its rational ending.

One of the difficulties here is the definition of life. Different definitions of life have been suggested, many of them in terms of one or the other of its properties. Bergson, for example, refers to *vieillessement* and the possibility of continual renovation. Others have defined life in terms of adaptation and assimilation or generation—a definition that could be related to the Bergsonian idea of *élan*. At least two of the definitions we have mentioned are related to time—time as the maturation and the treasuring of the past, or time as advance toward the future. As for assimilation, this might be conceived rather as a peculiarity of the space of living beings, which turns the outer into the inner. We must mention also the definition of life as totality maintained by Bergson and Whitehead. In life particularly there is no distinction between matter and form; and as Kant and even before him Leibnitz had seen very clearly, there is a reciprocal action of every organ upon every other. Still another definition of life is that of Bichat: life is the ensemble of forces that resist death—which is somewhat tautological, or that of Claude Bernard, according to whom life is governed by an *idée directrice*.

Remembering what we have said about adaptation and generation, we might define life as a kind of transcendence, always proceeding toward the future and outward, but an integrating transcendence, always interiorizing the future and the outer into its own growing totality.

The different explanations of life we find in Lamarck, in Darwin, and in Eimer (who defines it in terms of orthogenesis or a straight development in one direction) may be related to what we have said about the properties of life. This is quite clear not only with regard to the Lamarckian concept of adaptation, but also with regard to the Darwinian idea, which implies that life has a tendency to

divide itself into different beings whose numbers and differences in kind are the cause of what Darwin called the struggle for existence.

Starting from the ideas of Darwin, Herbert Spencer held that life, as well, in fact, as the other phenomena of the universe, is characterized by a continuous process of further differentiation and at the same time integration. Bergson, starting in part from the consideration of the same facts and seeing the divergent directions in the lines that life follows, came to the conclusion that life is something psychological, something like a tendency, for the nature of a tendency is to split itself into movements of different direction. In his *Creative Evolution* Bergson conceived life as very close to mind.

We might find an analogous tendency in the vitalism of Hans Driesch, whose definition of life is particularly interesting: life is the possibility of the processes of auto-regeneration

We have stressed the vitalistic or animistic interpretations of life. This does not mean that materialists may not have a true conception of life, provided that they are not mechanistic materialists. We might choose Diderot as an example of a non-mechanistic materialist. He sensed that Nature is dynamic, growing, and organic.

Finally, we could introduce into our conception of life something very close to an ethical element. Life may be defined in terms of a kind of unconscious or sometimes conscious hope, which is implied in what we have said about its *élan* toward the future. According to Schopenhauer, this hope is generally a subterfuge of Nature and leads us to disillusionment in the end. But what is important for us here is not so much the judgment of Schopenhauer about the value of hope as his affirmation of its existence within every living being. We find another pessimistic interpretation of life in Heidegger, who sees every existing being as defined by its going toward death, which he calls the impossibility of possibility. But we may question whether this orientation toward death is really fundamental in the feeling that the living being has about himself. We should accept neither the false hopes that Schopenhauer emphasizes nor the moment of despair through which, according to Heidegger, we all have to pass. But we may still define life by this quality of hope.

This hope is not directed toward life itself and indeed, at least in its highest manifestation, is founded on the idea that life has to

realize ideals that in one sense are above it. One of the problems of philosophy is to preserve the idea of life formulated under the influence of both scientific observations and romanticism, together with the belief of the ancients in the value of the unwritten law, and the idea of something which, although it may perhaps be explained vitalistically and historically, transcends both life and history.

Above things and living beings we find persons. But the concept of personality has evolved rather slowly. In antiquity it was a religious and dramatic rather than a philosophical concept. We may mention in passing that, curiously enough, the Greek word for 'person' also means a tragic mask. Nevertheless, the concept of the person as such is present in the dialogues of Plato, if only by virtue of the fact that they are dialogues among persons. We also find an implicit affirmation of personality at the end of the *Republic* when Plato represents the unity of one human life as chosen by itself in an act that takes place outside space and time. Moreover, in his dialogues on love and beauty, the *Phaedrus* and the *Symposium*, he describes the ascent of persons through the love they have for other persons. But the goal remains the attainment of impersonality—impersonal Beauty or the impersonal Good.

The idea of personality developed under the influence partly of Stoic philosophy, partly of Roman law, and partly of the Christian religion. We may take as an example of this last influence the intensely personal tone of Augustine in the dialogues his soul has with itself and with God. In fact, we might trace this religious view of personality farther back to the conception of the Hebrew God, who refers to Himself as the Being who is and speaks to his people as one person speaks to another. But certainly with the rise of Christianity the idea of personality took quite another form. It was very different also from the conception of the Greek gods, and Kierkegaard in one of his first works very justly opposed the Greek idea of personification and the Christian idea of the incarnation of the Deity.

From Augustine to Pascal we may follow this idea of personality. In an interesting passage Pascal asks what it is that we like in a person, and whereas Plato would have said that what we like is the person's beauty or his moral value or some other specific quality, Pascal says that it is not any one of these attributes and

that we cannot define what it is that we like. Montaigne, asked why he liked his friend, answered, 'Because he is he and I am I'. Thus, Montaigne and Pascal implicitly opposed the Platonic conception of specific qualities or traits, replacing it by the conception of personality.

We certainly cannot find such anti-rational affirmations in Leibnitz. He conceived a hierarchy of beings and called the superior beings *esprits*. There is a *république des esprits* over which God reigns. But the great difficulty of the Leibnitzian theory of personality is the fact that, ordinarily at least, he denied that a person can have any direct influence on another person.

We might find in Berkeley at least the elements of a conception of a universal dialogue between God and the soul. According to him, the sensible world is the language God speaks to man.

From the rationalism of Leibnitz, Kant retained the idea of a *république des esprits*, but in his *Critique of Practical Reason* he went even farther. One of the moral rules he formulated is that nobody ought to use another person only as a means, but always at the same time as an end. In the presence of persons, when they obey the moral law, we experience the same state of mind as we do before the moral law itself—the state of mind that Kant defined as respect. For a moral person is a person who follows the law he has given to himself. On this point Kant made use of ideas already advanced by Rousseau.²

Among the successors of Kant we may once again oppose Hegel and Renouvier. For Hegel, the self, although it is more real than its particular manifestations, is less real than the whole of which it is a part, e.g. the state, the culture that has formed it, the work to which it devotes itself and which is much more permanent than its fleeting consciousness. For Renouvier, on the contrary, what is important is the person, and he goes so far as to divide philosophies into two great kinds: on the one hand, the philosophies of the thing, and on the other, the philosophies of the person. These last philosophies are founded on the affirmation of freedom and finitude, while the first are the philosophies of the infinite and the necessary, such as those of Spinoza and Hegel.

² In Mame de Biran's doctrine that there is a direct communication between persons we may find a foreshadowing of an idea that was later developed by Scheler.

Josiah Royce was very much influenced by Hegel, yet, perhaps because of his religious education, he tried to complete the theory of Hegel with a theory of personalities in constant interaction. There is a continual exchange of questions and answers, an interplay of invocations and prayers. Royce opposed to the realm of observation and theory what may be called the realm of interpretation. His philosophy culminates in the affirmation of loyalty—loyalty to a cause; and it is this loyalty which constitutes the person. In the philosophy of Royce elements of Kant and Hegel, with both of whom he was admirably familiar, are integrated into a world vision which more justly perceives the living, pulsating aspects of reality.

James, on the contrary, was more definitely an adversary of Hegel, particularly because he believed that Hegel's theories did not leave a sufficient place to the individual. It was for this reason that at one time James chose Renouvier as his master. James did not completely develop his conception of personality, but certainly the affirmation of its importance is present in many of his theories—for example, in his theory of religious experience as well as in his theory of human activity.

Hocking in his *The Idea of God in Human Experience* has pointed to the impossibility of separating one consciousness from other consciousnesses. James also advanced the same idea. But in Hocking it is presented with much more liveliness. We may consider Hocking as a follower of Royce. However, he elaborates Royce's system, particularly by showing that in every act of consciousness there is felt the presence of our fellow men and of God. There is no consciousness which is not co-consciousness. This idea of Hocking may be compared with certain of the ideas of Scheler and Heidegger.

Scheler lays particular emphasis on the feelings of sympathy and maintains that they are not posterior to the feelings that the individual has of himself. The unity of ourselves and the other is prior to the unity of our own self. And sympathy cannot be reduced to any intellectual deductions; it is a primary feeling.

At the opposite extreme is solipsism. Solipsism, which is, in fact, a doctrine rarely maintained, poses many problems. We might find an example of this doctrine in the philosophy of Stirner, who de-

finds his own individuality as the one individuality existing in the universe, the others being only its representations. But Stirner advocates solipsism from a purely ethical, or rather non-ethical, point of view. The American philosopher Strong has also proposed a hypothesis that tends in the direction of solipsism. In fact, however, this theory is rather a figment of philosophers eager to refute it than an actual philosophical doctrine, since we know very well, and even by immediate experience, or rather by a pre-immediate experience, that other persons exist.

One of the characteristics of contemporary philosophical reflection about the relation between persons is this insistence on the necessity of other persons even for the constitution of my own person. Another characteristic feature, which may be traced back to religious thought, is the contention that the relation between persons is not objective but subjective and can be translated only by words like 'I' and 'Thou.' The realm of personal subjectivity is not translatable into objective relations, which are always described in terms of pronouns like 'he' or 'it.' The German writer Hamann and the Danish thinker Kierkegaard presented theories of this kind, which have since been developed by Berdyaeff, Buber, and Gabriel Marcel. Thus, the *république des esprits* is no longer conceived in a rational manner, as it was by Leibnitz and Kant, but in a more emotional one, as it was by Royce.

Our last two observations, concerning the necessity of other persons for the constitution of one's own personality and what may be called the vocative character of this relation, refer to the relations between persons rather than to the nature of personality itself. But the first of these observations already shows us how closely these two questions are connected.

As for the problem of the reality of the person, we must return to what we have said about substance; for here again we are faced with the problem of personal identity. We have said that there is something permanent in ourselves, but that this something cannot be defined or even enunciated, and moreover that this permanence is the renewal of certain states of mind rather than a static permanence. We may add now that just as there is a dialogue between ourselves and others, so there is a dialogue between me and myself. A question might be raised whether this dialogue takes

place between the transcendental ego and the empirical self, as they were conceived by Kant, or between the active self and the passive self, as they were conceived by Maine de Biran, or whether we do not have to pass beyond these distinctions altogether and assert only that there is a continual interchange between me and myself. This idea too we might find in Royce.

This intercourse between different selves and within the 'same' self has never been more clearly seen than in contemporary philosophy. On the other hand, a solipsistic conception of the self has prevailed in some minds more definitely than ever. Without mentioning the philosophical solipsism of the disciples of Max Stirner, we may allude to the literary aspects of solipsism as they may be seen in Mallarmé, Valéry, and Proust. It is true that in one of his most famous poems Mallarmé writes:

We were two, I maintain it.

But his poetry revolves around the idea of solitude and imprisonment in solitude. Valéry makes an effort, more or less consciously, toward communication with the movement of life—the life of the trees or the life of the sea. Yet for him, as for Mallarmé, there is an individualistic or even solipsistic point of departure which is never completely left. As regards Proust, he is the author who has in fact most strongly denied the possibility of communication between persons. For him the 'I' is closed in upon itself. Every other person is only a sequence of images. And even I am only such a sequence for myself. The whole world is reduced to a sequence of phenomena, as it was for a psychologist like Taine. There is no place for invocation or real prayers, for they would be addressed only to images, which are ultimately our own images. However, Proust's affective Platonism permits him occasionally to experience essences outside time—but rather as ideas or feelings than as incarnated in persons.

The difference between those who believe in interpersonal communication and a writer like Proust could be interpreted as the difference between religious thinkers and a thinker without God. But to interpret the difference in this manner would be to take a too restricted view of the question, since one can affirm interpersonal communication without necessarily affirming God. A similar obser-

vation might be made with regard to those who would reduce the question to a difference between those who affirm and those who deny the possibility of telepathy. To solve our problem from the point of view of philosophy, we do not have to take account, at least in the first instance, either of religion or telepathy.

And so the question remains and probably will remain. For here there is no theoretical answer that would be universally valid. Evidently we cannot say that those who deny that they can communicate with their fellow men are indeed in communication. As for those who affirm and feel in themselves the possibility of interpersonal communication, to deny their belief is perhaps only to be unable to place ourselves in their position and to reach the level of existence on which they place themselves. This does not mean that they are right, but only that one cannot prove that they are wrong. On their side they have the greater fulness of experience. On the side of their adversaries there is more often a greater need and desire for accuracy. Whether these qualities can be united, whether accuracy in these matters does not have to be transformed into something else, remains unsettled. We may recall at this point the words of Socrates when, having presented his proofs for the immortality of the soul, he concludes by saying that they are like some divine enchantments, that a question still remains, and that there is a 'beautiful risk' to be run. We thus have to ask ourselves whether we shall remain wholly within ourselves or run the risk of transcending ourselves and reaching toward other persons.

One observation that can be made on this point is that the feelings of personality and impersonality are often mixed. We see in Proust examples where the feelings of 'thou' (addressed to Albertine) and the feeling of 'she' (representing Albertine) are mingled. The more objective representation creeps into the more subjective invocation. Another case, very different in character, of this union of personality and impersonality could be found in the person of Don Giovanni, whom Kierkegaard interpreted as an amorous and restless Platonist. Still another conception would be that of Plato himself when he describes the ascent of the philosopher-lover from beautiful persons to impersonal beauty.

It is not only with representations that the invocation is mixed, but also with sensations. So the soul has to wander, having on one

side of itself impersonal ideas and on the other side bodily sensations. Even this analysis probably separates the different elements too much, body, soul, and ideas are more deeply fused with one another than pure spiritualists (the partisans of the soul) or pure emotionalists (the partisans of invocation) would assert.³

³ From this idea of invocation we can see how language may be used as a starting point for philosophical reflection. As we have noted, the structure of grammar has had great influence on the constitution of Aristotelian logic, but we may find in grammar suggestions leading in quite other directions—for example, if we take account of the fact that there is not only the nominative case, but the vocative, or that not only is there the subject-predicate relation, but there are many other relations.

AT SEVERAL places in our inquiry we have been confronted with the problem of relations. The question arose in our consideration of substance, of causality, of space and time, and of the reality of the sensible world.

This problem first took clear form in Western philosophy in some of the followers of Socrates. As Zeller has said, Socrates was the philosopher of the concepts. Hence his theory that behind the fleeting particular qualities there are universal Ideas. Some of his disciples, particularly Euclid and his school in Megara, held that no real thing can be the quality of any other thing, so that they finally came to deny the possibility of adding verbs or predicates to subjects. There remained merely subjects about which nothing could be said to qualify them. The horse is a horse, but we cannot say that it is white, because only white is white; nor does it run, because all that can be said about it is that it is a horse.

We may compare the results of these Megarian reflections to some of the results of the Eleatic philosophy, which had for its consequence a denial of any change or movement in the universe. This doctrine was interpreted by Zeno as well as by the Megarians to mean that only terms exist; their relations are merely appearances.

With regard to this question the atomistic philosophy could also be compared to that of the Megarians and the Eleatics, since, according to Democritus, reality consists only in the atoms, which are the terms of all relations.

All of Plato's philosophy may be regarded as a grand attempt to justify and explain the positing of relations by the human mind. In this sense it has been considered as a refutation of the Eleatics, of the Megarians, and even perhaps of the atomists. It is the

affirmation of the possibility of judgment as a relation between different terms. This is the problem that is solved in the *Sophist*. An idea has its definite character because it is other than other ideas. So the idea of relation itself implies the idea of the particular relation that is otherness. Otherness is a general characteristic of every one of our ideas. To be sure, likeness is also a fundamental relation in Platonism. Platonism is the affirmation of the sensible world as other than the intelligible world and containing within itself things that have mutual relations of otherness. These mutual relations of otherness in the sensible realm are imitations (i.e. likenesses) of relations of otherness in the intelligible realm.

In the *Parmenides*, the dialogue that posed the problems solved in the *Sophist*, Plato raised questions and ventured hypotheses very important for the development of Neo-Platonist philosophy. Here, before representing terms as being in relation to themselves and other terms, he formulated the hypothesis that there may be a term so completely itself, a One so completely one, that it can suffer no predicate. For this One at least, the Megarian solution of the problem of relations would be correct. This One, which may be called the first One, is, as we shall see, the goal of mysticism, whereas the path of science leads toward what may be called the second One. It is on the basis of the latter conception that the later dialogues of Plato elaborate the solution of the problem of relations: the *Timaeus* treats of physical and finally mathematical relations, and the *Philebus* represents the world as a relation between the unlimited and the limited in agreement with certain laws of harmony.

The philosophy of Plato was directed against not only the Eleatics and the Megarians but also such extreme relativists as Protagoras, who may be logically considered as a follower of Heraclitus. Plato showed in the *Theaetetus* that the Protagorean theory of universal relativity denies the possibility of judgment just as completely as does the theory of the Megarians. Thus, Plato's theory of relations must be regarded as a theory of regulated relations, opposed no less to the chaotic relations conceived by Protagoras than to the complete absence of relations affirmed by the followers of Euclid.

So important did Aristotle consider relations that he had a special

category for them, which he called the category of 'in relation to,' and which he placed alongside such other categories as space, time, and quality. But, according to him, all these categories are themselves related to something fundamental, namely, substance. He conceived substance as the subject of all judgments. The categories are judgments about this subject or substance. So all relations were conceived by Aristotle as of the type of the relation of attribute to subject. Relations that could not be reduced to this form were ignored or were illegitimately reduced. According to the modern theory of relations, impersonal judgments (such as the proposition 'It is raining') or judgments of relation proper (such as the proposition 'Hartford is between New York and Boston') are not reducible to the Aristotelian formula. But the logic of Western philosophy, exclusive of the work of Russell and other recent logicians, has been based on this Aristotelian conception of the form of logical judgments.

As we have already intimated, the Neo-Platonists followed along the lines drawn by Plato in the first hypothesis of the *Parmenides* and in the seventh book of the *Republic*, which they interpreted in the light of the *Parmenides*, and conceived of a One, a God, an Absolute superior to every relation and to every thought. From Proclus and Philo and Damascius these ideas passed to Dionysus the Areopagite and the Christian mystics.

But, following the philosophical tradition, we may go from Aristotle to Descartes. Descartes criticized the Aristotelian conception of the universals. Nor is it by any means easy to put the Cartesian affirmation of the *cogito* into the form of an Aristotelian judgment of attribution. On these two points Descartes may be considered as an adversary of Aristotle. Moreover, Descartes maintained that we can grasp in a single instant not only terms, but also relations. It is in this manner that we have the intuition of the *cogito ergo sum*. Descartes' aim was to integrate the whole world into a scheme of the clearest possible relations, namely, mathematical relations.

Curiously enough, although the system of Descartes was opposed to that of Aristotle with regard to the question of relations, it was not on this point that either Descartes or the Cartesians raised the issue. As for Leibnitz, whose philosophy contains many different logical tendencies, as Russell, Couturat, and Cassirer have shown, we may say, nevertheless, that on the most important

point he followed Aristotle and followed him, in fact, to the utmost extreme. His theory of monads, and indeed his whole system, may be interpreted, as Russell has shown very clearly and as Leibnitz himself had already done in his *Discours de Métaphysique*, as the consequence of his famous formula. every predicate is inherent in a subject. But Leibnitz had many other interesting views about relations, particularly relations in space and in time, for he conceived space and time partly as conceptual orders, partly as confused perceptions.

Malebranche put all relations into the understanding of God, in almost the same way, in fact, as Leibnitz did, and divided them into relations of existence and relations of perfection (which we should call relations of value).

According to the rationalistic philosophers we have mentioned, relations do not come from experience. As Kant later said, they are brought to experience from the mind and by the mind. Logically, the empiricist philosophers would be those who hold that relations can be found in experience. But we need only recall that even Locke, at least at the end of his great work, held that there are relations that are grasped by the mind in themselves and apart from experience. As we have already had occasion to observe, the difference between rationalists and empiricists is sometimes rather hard to draw. the rationalists concede a role to experience, at least as a starting point and even sometimes as a means of verification; and the empiricists admit that there are relations that are perceived independently of their origin in experience. The case of Hume is complicated by the fact that, according to him, experience itself, in so far as it is dominated by the law of causality, is constituted by what may be called a faculty of relating, which is habit or custom. There is, moreover, a kind of hesitation in Hume between a tendency to reduce relations to their terms, as he does with time and space, which he reduces to points and instants, and the tendency to emphasize relations like custom and habit. According to him, there are not only terms and custom or habit, which are the foundation of causality, but other relations, such as identity. Yet here also we find the same hesitation between psychological atomism and a continuity theory based on his conception of habit. These observations about Hume lead us to a more general remark. Empiricism in modern philosophy is based on the theory of the association of

ideas. This means that it is based on a conception of a certain kind of relations between ideas. If we take this fact into consideration, we may question James's criticism of ordinary empiricism, for he accuses it of not taking account of relations. However, James is right in the sense that association, for the empiricists, takes place between separate ideas, and he feels that we have to maintain a much more pervasive continuity between the so-called states of consciousness.

We have not spoken of Berkeley among the empiricists. He is not, in fact, an empiricist. Here we need only state the theory of relations implied in his theory of the notion. He understands by the term 'notion' the inner perception we have of our active self and also of relations, his presupposition being that relations themselves always bear a relation to the self and that the self too is something like a relation.

Kant was not satisfied with the empiricists because they did not account for the universality and necessity of mathematical and physical relations. Nor was he satisfied with rationalists like Leibnitz, who seemed to him to consider rational relations independently of experience and failed to take into account what is not reducible to pure conceptual relations either in time and space or in causality. So he had to create between sensations and what he regarded as empty rational concepts a new mode of thought, which he called the forms and the categories. Kant was opposed not only to the empiricists and the classical rationalists, but also to Aristotle, whose logic is not sufficient to provide the foundation of real experience.

Maine de Biran, whom we may compare to Descartes and Leibnitz, and even more to Berkeley, emphasized the active relations of which we are conscious in our feeling of effort, and may be considered, like Berkeley, as a precursor of the radical empiricism of James and Bergson.

The whole system of Hegel is dominated by the idea of relations. Rationalism and empiricism are here subsumed and sublimated, to use Hegel's word, in a higher synthesis. Nothing exists in isolation. Everything is related. He conceived what he called the concrete universal—for example, the self, a work of art, or the state—as a complex of relations. The Absolute is itself a whole of relations. Nothing in this system is separate and nothing is abstract.

But this very idea of relations was questioned by one of the most

important Hegelians, the British philosopher Bradley. He saw the human mind as always divided between the affirmation of terms and the affirmation of relations and as becoming conscious (in his own philosophy) of the fact that terms cannot exist without relations or relations without terms, so that these two modes of considering things imply and destroy each other at the same time. Consequently, we have to do away with the whole relational scheme, and, returning to a thought not far from that of Parmenides, to affirm an Absolute of which we have no idea, but which would contain everything in a sublimated or, as Bradley says, transmuted state, that is, in a super-relational unity.

We may find analogous ideas, but on a more empirical level, in James and Bergson. Thus, there is a kind of coincidence between the doctrines of the last exponents of rationalism and those of the last exponents of empiricism. The mistake of ordinary or classical empiricism, according to both James and Bergson, was that it was primarily concerned with the terms of relations and failed to see that what James called the transitive moments are as important as the substantive ones. Bergson emphasized the fact that a sentence or a melody cannot be reduced to static, successive components. This is, to be sure, an insistence on relations, but on felt relations, something analogous to what Bradley conceived as the finite center, the subjective core of our experience.

There is another resemblance between Bradley on the one hand and James and Bergson on the other. All three think that we can attain the Absolute—a real Absolute for James and Bergson, and at least a kind of Absolute for Bradley—if we turn toward the continuous background of our experience—the stream of consciousness in James, the *durée* in Bergson, the finite center in Bradley.

Philosophy moves by successive contrasts. No sooner had Bradley and Royce declared that terms are never independent of their relations, and no sooner had Bradley denied the validity of relations, than a school of philosophy arose that based its theories on the doctrine of the independence of terms with regard to their relations. This is the thesis of neo-realism, which was formulated under the influence partly of Russell and partly of James. James' ideas about relations are, in fact, inconsistent, since he sometimes plunges everything into relations and sometimes says that terms can remain the same in different relations. Neo-realism, as formu-

lated by Perry, is based on the idea that it is invalid to conclude, that, simply because everything we know is necessarily related to the mind, nothing can therefore remain the same out of knowledge, when it is not related to the mind, as in knowledge. Moreover, as James had already said in his article *Does Consciousness Exist?*, the thing and the idea of the thing are one and the same term, but seen in different contexts or relations. Here the relational scheme helps us to formulate intellectually a fundamental human belief embedded in perception itself.

It remained for other philosophers—Whitehead in particular—to proceed to a new, contrasting theory, which, by means of the idea of prehension, maintains both realism and the doctrine of the dependence of terms, at least in the real world, with regard to their relations.

The first conclusion that emerges from these historical reflections is that there is a great multiplicity of relations and that the Aristotelian scheme is quite inadequate to their rich variety.

Moreover, it is apparent that the human mind first affirms the existence of terms, then sees the dependence of these terms upon relations, and then, going farther, sees that terms are only complexes of relations, and that, on the other hand, relations are affirmed in rationalistic philosophies first as independent of their terms, particularly of empirical terms (according to Plato), then as empty when they are separated from terms (and we may interpret the system of Kant in this sense), and then as deeply united with the terms (as in the system of Hegel). Thus, both empiricism and rationalism tend to one and the same vision of things, that is, as things that are in themselves relations.

Nevertheless, we have to take into account Bradley's observation that there is something deeper than relations, namely, the whole of the real, the one Reality.

From this point of view, we could separate the relational realm, which is governed by laws (the laws of mathematics, logic, etc.), from the non-relational realm, which is only felt, in the manner which Bradley, James, and Bergson have described.

If we are thus able to distinguish the relational and the non-relational realms (of which the latter may be called sometimes infra-relational, sometimes supra-relational), we may also speak of a

realm of terms, a terminal realm. The human mind is always constituting terms, prehending and comprehending relations, and synthesizing them around one center. The process we have described and by which the mind destroys the terms in merging them into relations is preceded by another process through which it constitutes the terms. Perception, even judgment in its first forms, is a constitution of terms. Mind makes terms emerge from the magma of primordial relations.

This idea of terms may itself be interpreted in different ways according as the emphasis is placed on intellectual or on affective terms. In discussing substance, we tried to replace the intellectual idea of substance by an affective one. Bergson, when he endeavored to present his idea of the Absolute, said that we must place ourselves inside the object, which then ceases to be an object.

We have seen successively the reality of the non-relational realm, the relational realm, and the realm of terms. Science is one way of interpreting the relational realm, and the different philosophies of radical empiricism are another. As for the terms, we may find the same duality between a rational terminalism like that of Plato and an affective terminalism like that of Proust. They are not so different as they seem at first. Some critics, such as the German Curtius and the French Saurat, have insisted on what they have called the Platonism of Proust.

Sheldon in his *Strife of Systems* and in his following works has tried to reconcile the two principles of the union of terms and relations and the independence of terms and relations. But in spite of the great value of many of his observations, his eclectic conclusions do not seem satisfactory or logically cogent. We must still somehow cover the distance between the constitution of terms and the negation of terms and between the constitution of relations and the negation of relations, seeing along the way the constitution of things as the terms of perception, science as the knowledge of relations, our intuition of duration as a feeling of relations, and our union with affective terms as union with the Absolute (perhaps realized, perhaps only imagined).

IN DISCUSSING the problem of knowledge, we could also have dealt with one of the contraries of knowledge, namely, error. This is the first of the negative ideas we now have to examine.

According to some of the Sophists, error is impossible because the judgment of every man is always true for him. One of the aims of Socrates and Plato was to show the possibility of error; for only if error is possible is real knowledge possible in opposition to it. Plato explained error as a lack of adaptation between the inner relations of judgment and outer relations in reality. The Stoics developed a less intellectual conception of error. For them, knowledge and certainty involve an act of the will. This Stoic affirmation, strengthened by certain Christian doctrines, reappeared much more forcibly with Descartes. According to him, error is possible because, while our will is infinite—as infinite as the will of God—our understanding is limited; and our infinite will, not suffering any delay, always wants to affirm something, even when our limited understanding has not completed its examination. According to Pascal and Malebranche, error comes from what they call the deceiving powers in us, such as imagination and habit and also, for Malebranche, from a kind of laziness inhibiting the movement of the mind. Later the French philosophers Renouvier and Brochard, affirming the importance of the will in judgment, took up again the theory of Descartes. Indeed, this insistence on the role of the will may be taken as characteristic of French philosophy in the nineteenth century.

But what is important in this context is not so much the origin of error as its metaphysical status. In a rationalistic scheme of the universe error is only a partial truth. If a square tower seems to us

round, it is true that for us it seems round, from the point of view of sensation there is no error. Error occurs only in the sphere of judgment, and it occurs then because what we have felt we extend into a general statement. What was true for us ceases then to be true and becomes an error. Spinoza emphasized this point when he said that there is nothing positive in error. In this respect he opposed Descartes, for whom the presence of the will is something positive, so that in error we are deprived of the truth we ought to possess. Moreover, according to Spinoza, the separation between the will and the understanding is itself a mistake, founded on pure abstraction. Hegel too pointed to the completely negative character of error.

The tendency of the adversaries of Hegel, like James, was naturally to emphasize the reality of error. A world in which there are only degrees of truth and never complete errors is a world in which there cannot be real truth. This argument of James could be directed against Leibnitz as well as against Hegel.

In fact, the reality of illusion is in itself a kind of refutation of complete rationalistic monism. This can be shown most obviously in the case of Parmenides. Having written the first canto of his poem about Being and Truth, he had to write a second canto about Error. He thereby revealed that a complete monism fails, since illusion, even if it is only illusion, exists, at least as illusion.

Another negative idea is the idea of disorder. There is not much that needs to be said about it after the pages that Bergson has devoted to it in his *Creative Evolution*. According to him, there is an appearance of disorder when we seek one of the two kinds of order, for example the vital order, and find only the other one, the mechanical order.

For other reasons the existence of real disorder was denied by Spinoza. All is ordered, and it is only our ignorance that makes for the appearance of disorder. Thus, disorder would be one aspect of the negative idea we have already studied, the idea of error, and we could say as well that error is a kind of disorder.

We can easily see what consequences such a negation of disorder must have for the problem of the organization of the world. If, as Bergson says, there is always some kind of order, we might conclude that we need no God to put order into the universe. The

question remains, however, whether this resolution of the idea of order into the two different ideas of vital order and mechanistic order is sufficient to make the problem disappear. It is true, nevertheless, that the proof of the existence of God from the presence of order becomes much less convincing once one has realized the immanence of some kind of order in Being itself (Being here taken as synonymous with: the world).

Still another negative idea is the idea of evil.

Socrates maintained that evil is ignorance and that nobody does evil voluntarily; for, as his disciple Plato would say, the idea of the Good is so strong that if one sees it, one cannot fail to act in accordance with it. So evil is a kind of error, and error a kind of ignorance. It is true that in the *Republic* Plato asserted that every man chooses his character in an act that we cannot locate in any moment of our time, since it is prior to our birth, and that in this act each man manifests his worth, his good or his evil character. It is true also that in the *Phaedo* Plato advanced the idea that the flesh may render the soul heavy and weigh it down. Thus, evil would be, according to the *Republic*, a kind of inherent character in some men, and, according to the *Phaedo*—and also the *Phaedrus*—a consequence of the flesh or of evil tendencies in the soul. We may say, nevertheless, that the theory of the ancients, and particularly of Socrates and Plato, on this point involves the denial of any positive character to evil, which they ordinarily reduced to ignorance.

Of course, this generalization does not include the views of all the ancient writers, particularly not the tragic poets or Thucydides, but it remains valid on the whole.

With Christianity the view of evil changed. The Jewish idea of an original sin was interpreted as meaning that there is in man a tendency toward evil—what Paul called the law of the flesh fighting against the law of the spirit. This affirmation of the positive character of evil did not have an influence on the great classical philosophers before the time of Kant. It was, as we have seen, one of the reasons why Kant could not accept the rationalistic optimism of Leibnitz.

In fact, Leibnitz had tried to explain evil away, under the three forms he had distinguished—metaphysical, physical, and moral evil

—as pure negation, as a kind of complement, and even an implement, of the Good.

After Kant, the idea of evil as something positive was further developed by Kierkegaard. No philosopher has insisted more clearly on the opposition between ancient and modern thought on this question.

To be sure, we might allude also to the philosophy of Schopenhauer, for whom Nature is evil in its very essence; but his conception does not seem to have been formed under Christian influences only, and for him the realm of evil is ultimately only appearance.

The problem in Nietzsche is rather different from that of the preceding philosophers because, in agreement with William Blake, he saw in evil the principle of energy. The question is no longer about the positive character of evil, but about its value.

We may find prefigurations of this idea not only in Blake, but also in Boehme, who, together with the mercy of God, spoke of the anger of God. Let us also recall Dante's idea that Hell itself is constituted by God's charity.

The question of the positive character of evil cannot, in fact, be solved apart from psychological considerations and the question of value. Here we may remark only that it is necessary to define a little more precisely what is meant by the term 'positive.' We should be driven into very great difficulties concerning the positive character of something as negative as evil. This problem would naturally lead us to the fundamental problem of Not-Being or Nothingness.

In poets such as Baudelaire and in novelists such as Dostoyevsky and Melville we find affirmations of the positive character of evil. There are two postulations in man, said Baudelaire: one toward the good, the other toward evil. The positive nature of evil has never been affirmed more strongly than in modern times.

It may even be said that this insistence on evil as positive has led to a clearer consciousness of good, since each opposite takes a more intense value from the other. Hegel and Nietzsche, from different points of view, have called attention to the fact that the darkest hours of humanity are followed by the fairest: according to Hegel, from the 'Unhappy Consciousness,' which is in part a humiliated consciousness of the presence of evil in us, comes the happiest consciousness, and according to Nietzsche, from an ex-

treme decadence, a new classicism, a new happy life, will reappear. William James, either influenced on this point by Carlyle or simply agreeing with Carlyle, maintained that the good is not the complete canceling of evil, but rather the triumph over evil, which, although dominated, always remains present.

Returning from these observations to the thought of Baudelaire, we can see how a too unrestricted—at least in appearance—affirmation of evil may lead to despair and to what may be called a reactionary view of life, which we find also in Joseph de Maistre, one of the masters of Baudelaire.

An element of hope has to be kept in order that the mind may not remain too much enclosed in the contemplation of evil and may go from it to faith in the good.

William Blake conceived evil as energy, and André Gide in some passages—particularly in his book on Dostoyevsky—has followed Blake on this point. The problem would then be to apply the energy that, according to these thinkers, accompanies evil to acts directed toward the good. On the other hand, we may observe that even if man feels within himself this energy directed toward evil, he never goes so deeply into evil as these thinkers seem to believe; and even if energy is there, it is relatively powerless in the sense that Absolute Evil, fortunately, escapes man as well as, or perhaps more than, Absolute Good.

Finally, the problem of evil probably has no theoretical answer and even no purely theoretical definition. We are reminded here of James's statement that evil is a practical, not a theoretical, problem. Evil is what we have to fight against, what we have to destroy, and there is no other attitude toward it but the practical attitude that consists in saying I am against it.

About Nothingness or Not-Being at least three theses are possible: Not-Being is absolutely not; Not-Being is something, but different from pure or absolute Not-Being; Not-Being is.

The first is the thesis of Parmenides. From it he concluded that Being is the only thing that is, and from this in turn he concluded that there is only one Being. So, according to him, the affirmation of the being of Not-Being is an error and even the source of all errors.

The denial of Not-Being is a fundamental characteristic of ra-

tionalism. We may take Descartes as an example. The universe of Descartes is a rational universe in which there is no place for Nothingness and for that *malin génie* which he first imagined. It is a universe in which everything is regulated by the Perfect; and just as in his metaphysics there is no place for Not-Being, so in his physics there is no place for any Void. Leibnitz may be taken as another example of the same tendency. According to him, every perfection is compatible with every other perfection; indeed, this is one of the presuppositions of his proof of the existence of God. In fact, God for Leibnitz, no less than for Descartes and Spinoza (for whom every determination is negation), is the positive element that is the foundation of everything, and the affirmation of God is equivalent to an affirmation of the plenitude of Being.

We may perhaps include Democritus and the atomists among those holding the second thesis, that Not-Being is something, but something different from pure Not-Being. They said that between the beings, which are the atoms and which may be conceived as the Absolute One of Parmenides split into an infinite multiplicity, is a something that is Emptiness or the Void. It is precisely because there is the Void that the Absolute One is split into so many ones. Here we find an example of dialectics in the history of philosophy, since immediately after the Eleatic negation of Not-Being came the Democritean affirmation of the Void.

We may certainly include Plato among those who hold this second theory of Not-Being. In the *Parmenides* Plato showed how the hypothesis of his master Parmenides would destroy the sensible world, science, and the intelligible world. In the *Sophist* he showed that it is necessary to say that in one sense Not-Being is, because each thing is what it is and is not what it is not, so that the very definition of a thing implies the negation of all the characteristics it does not have.

Thus, the problem in Plato was again transferred to the sphere of judgment; and Not-Being was no longer conceived as Absolute Not-Being, but as relative not-being. Being was identified with difference: difference is the reality of Not-Being. And under this category of difference, Not-Being was classified among what Plato called the greatest kinds of Being; it is one of the fundamental categories of the mind and of reality.

Aristotle would agree with Plato that there is no Absolute Not-

Being, but he conceived relative not-being, which he admitted, in a very different manner. According to him, in order to refute the Eleatic theory on this point, it is necessary to make a distinction between Potency and Act. The marble that will be used by the sculptor in order to make a statue is not the statue in Act, but the statue in Potency; it is potentially the statue. So 'not to be' may be taken in two senses; and the whole distinction is connected with the idea of movement as interpreted by the concepts of Potency and Act.

But rather than from Aristotle (who exemplified, particularized, materialized, and intellectualized the Ideas of Plato) we may go from Plato to Hegel, who liked to compare his teachings to those of the *Parmenides* and the *Sophist*. Hegel placed the idea of Being at the beginning of his *Logic*. Yet, he said, if we consider the idea of pure Being, it vanishes from our attention; and, knowing that Hegel does not separate things and thoughts, we can say that it vanishes from reality itself. What remains before the mind in the presence of pure Being? Pure Nothingness or Not-Being. This is the first step in the dialectics of Hegel—this transformation of Being into Not-Being. The next step is the synthesis of Being and Not-Being (which are both abstractions, i.e. Not, Being), which he finds in Becoming. And this makes plain, according to Hegel, how one may pass from the doctrine of universal Being, which is the One of Parmenides, to the doctrine of perpetual change, which is that of Heraclitus.

However, what we have just described is only one aspect of Hegel's theory of Not-Being; the other aspect is his doctrine of negativity. Change and movement, the ideas we have reached through a consideration of Being and Not-Being, are always present in our thought. Thought continually passes from one concept to its contrary, from thesis to antithesis, and then to the union or synthesis of the first term and its antithesis. Negativity for Hegel is the driving power of the universe. So we see that Not-Being, which for Plato was difference, is for Hegel movement and change.

Bergson is the third great philosopher, after Plato and Hegel, to present a theory of Not-Being that treats the problem from a really philosophical point of view rather than from the point of view of science, which we find in Democritus, or of common sense, which we find in Aristotle. According to Bergson, the idea of Not-Being

is a product of the mind when it thinks the idea of the whole world and then cancels it, so that the idea of Not-Being is really the idea of Being plus the canceling act of the mind.

We have thus seen Not-Being identified successively with emptiness, with difference, with possibility, with change, and with a particular movement of the mind. Such are the theories according to which Not-Being is something, but something different from pure Not-Being.

But here we must make an observation—particularly with regard to the last theory. For it can be readily seen that Bergson's theory amounts to saying that Not-Being is not, since it is only what he called a pseudo-idea. So although Parmenides and Bergson are widely divergent in many respects, the one being a philosopher of rest, the other a philosopher of perpetual movement and really a Heraclitean, they agree in their denial of Not-Being. Indeed, we may go farther and say that Hegel also, who may likewise be interpreted as a follower of Heraclitus rather than of Parmenides, is an exponent of the doctrine of the universality, the oneness, of Being. Therefore, this second kind of doctrine may be united with the first. We might have made somewhat similar observations with regard to Democritus and Aristotle.

The third thesis, i.e. that Not-Being is, may be taken in two senses. For one of these senses we have to go back again to Plato. In the *Parmenides*, at the same time that he seemed to refute the affirmation of his master, he suggested in the first hypothesis he developed that there is a super-essential One about which we can say nothing. From this passage and from the famous passages in the *Republic* on the Good which is above essence, the Neo-Platonic philosophers concluded that Plato believed in a principle that is so much above anything that can be named that it cannot even be called Good, but rather Not-Being or Nothingness. And from this doctrine, as we have already seen, came a whole strain of Christian mysticism.

In some German mystics such as Eckhart and Boehme this doctrine was combined with some others and produced the idea of something above God, which is the ground of God and which Eckhart called the Godhead.

Here, then, we see a Not-Being which really is, and even is more than anything else. We may find similar ideas in Schelling.

A recent philosopher has affirmed (or tried to affirm) the existence of Not-Being more forcibly than any of his predecessors. According to many of the philosophers we have mentioned—Plato, Hegel, and most of all Bergson—Nothingness or Not-Being is the product of a faculty of negation that is in the mind (or in things). According to Heidegger, on the other hand, negation is not possible in the absence of a primordial Nothingness. It is not negation that renders Nothingness possible; it is Nothingness that renders negation possible. And Nothingness must have a particular mode of being, if we may speak here of being. In fact, it is much better not to speak of the being of Nothingness, but to find a particular word for it—an active word, since Nothingness is an activity. This is the reason why Heidegger has created the strange verb ‘to Nothing’ in order to characterize this ‘Nothinging’ activity.

There is certainly something very interesting in this effort to find a place in our thought and in the world for that idea of Nothingness which so many philosophers have either denied, like Parmenides, or transformed into other ideas, as Plato, Aristotle, and Bergson have done. There is, up to this point, in Heidegger a kind of faithfulness to a reality which seems present to the mind. Nevertheless, it remains to be seen whether this theory is not a translation into a kind of myth of certain images that appear to us. For we can have no representation of this Nothinging activity, this background of things. Yet we may say that with Heidegger philosophy has taken on (at least for the moment) a clearer consciousness of the problem of Not-Being in its more positive character, a problem that is probably insoluble because if we try to define Nothingness as something else, we destroy it, and if we define it by itself, we necessarily say nothing. In fact, Heidegger himself could not remain faithful to his theory and finally affirmed that this Nothing is Being *qua* different from beings. So he passed from the third interpretation of ‘Not-Being is’ to the first one.

The difficulty of the doctrine of Heidegger may be shown by the fact that some of his followers (e.g. Sartre), thinking to continue his thought, or to better it, finally interpreted it in Hegelian terms, and softened his theory of Nothingness into the Hegelian doctrine of negativity, and even conceived of Nothingness as a divided, Democritean Nothingness, but on a more conceptual, or rather psychical, plane.

So, aside from the Parmenidean affirmation of the non-existence of Not-Being, which is retained in various forms in many of the modern rationalistic systems, we find two remaining solutions. the reduction of Nothingness to another idea (and particularly the idea of the Other) and the affirmation of pure negation. But neither one of these possible solutions appears satisfactory: the former tends to destroy the idea of Nothingness, to eliminate the concept of antithesis, which is essential to the human mind, and finally to present us with too easy a view; and the latter, although perhaps its tendency is in the right direction, hypostatizes Nothingness (in a too uneasy view, this time).

Our problem is related to three other problems we have already studied: the problem of existence, because the word 'existence' itself means (or seems to mean) detachment from a background that can only be a background of Non-Existence, the problem of realism and idealism, because to ask whether negation or Nothingness is prior is to ask whether priority should be given to the mind as a faculty of negation or to Nothingness as a kind of objective reality; and the problem of Being, since if it could be shown that the idea of Being has no meaning, the problem of Not-Being might thereby be made to disappear also. As for the terms of the first problem, this idea of existence as detachment from the background of Non-Existence is no doubt a purely human representation and a kind of myth from which we can conclude nothing. With regard to the problem of realism and idealism, we have already seen that the egocentric predicament renders it very difficult; and in this case in particular it is nearly impossible to see what negation would be if there were not a negating being. Heidegger himself would acknowledge that his solution, according to which there is no negating being without Nothingness, is most difficult to accept. At least, he has not formulated it satisfactorily.

We seem to be faced with two solutions, the first too easy, the second too hard. But perhaps our reflections on the problem of Being may permit us to deny the possibility of saying anything satisfactory about Not-Being. If Being is an idea that has merely a unity of analogy, if it is ultimately a pseudo-idea, Not-Being will be in the same case, and we shall only have to take the different forms under which the idea of Not-Being appears and discuss them separately. And there is still another reason for avoiding the solu-

tion, and even the posing, of this problem. For the affirmation of the being of Not-Being is necessarily very close to, and probably identical with, the affirmation of the not-being of Not-Being. We are here in the midst of Sophistic predicaments, since the kind of existence Not-Being has is necessarily a kind of non-existence. The problem of Not-Being appears finally as the not-being of this very problem.

Turning once again to the whole problem of negative ideas, we are now in a position to see that the positive character of error, of evil, and of Not-Being has been more and more clearly emphasized by certain modern philosophers and that the feeling of the plenitude of Being has been insisted upon with more definiteness by Bergson than by any of his predecessors except Parmenides. So that here, as in other cases, as Sheldon has observed, the tension between opposites is greater now than at any preceding time in history. We see on the one hand an effort to emphasize what may be called the destructive element that is present in the world, and on the other hand an effort to keep alive the feeling of the fulfilment and plenitude of Being—or rather, since we have questioned the idea of Being, simply the feeling of fulfilment and plenitude. There is no definite solution that could be given here once and for all, but only the affirmation that there is in us a feeling of a destroying activity as well as a feeling of plenitude, and that neither one of these feelings can be defined, explained, exhausted, or destroyed and that each corresponds to, or rather is, something which is. To be *and* not to be—that is the solution.

AFTER studying relations in general, we were led to consider those particular relations that are the negative ideas. But, as Malebranche observed, besides relations of reality, there are relations of perfection, i.e. of value. Indeed, the latter are implied by some of the negative ideas, such as evil. Let us, then, turn to the study of value.

Here too we can begin from the consideration of classical philosophy. Plato and Descartes, in posing the problem of value, did not separate it from the problem of reality. For both, reality is a whole governed by a principle that Plato called the Good, and Descartes, the Perfect or God. It is at the same time the apex of Being and the apex of Perfection. Essence, existence, and value coincide, and their degrees are the same.

Kant demonstrated that in this trinity it is necessary to separate at least two of the terms: existence and essence. Existence cannot be reduced to essence.

Moreover, whereas the classical philosophers identified value with Being, Kant considered them as, in one sense, opposed to each other. This is very clear in his theory of ethical values, which is dominated by the idea of duty. According to him, the world of values, as well as the realm of the things-in-themselves, is closed to our theoretical understanding but is open to our practical reason. The one has no relation, the other has a plenitude of relations, to value. At least this is Kant's view in his Critiques of theoretical and of practical reason. But in the third and last critique—the *Critique of Judgment*—Kant contended that there is value within the real world based upon organization and immanent finality, a

value he analyzed in his treatment of aesthetics and of the science of living beings.

Later philosophers have given more and more attention to the duality emphasized in the distinction already drawn by Malebranche between the truths that are related to values and the other kinds of truth. The idea of value was first analyzed philosophically by Lotze, and important contributions to the analysis of this idea were made by the economists. Nietzsche then conceived his theory of the revaluation of all values. The philosophy of values, as it was originated by Lotze and then developed by many other philosophers, represented an effort to rediscover a kind of unity in what had been broken by the effect of the Kantian revolution. It developed in the period Nietzsche called the 'nihilistic period,' that is, at a time when the human mind found itself confronted by a world without values. It is at the moment when value is less felt in itself, when the feeling of value diminishes, that the theory of value develops. We are in a world that could be compared to the cave referred to in the *Republic*, where there are, as it were, only flat images projected on a wall. We might symbolize this superficial character of the modern world by calling it a film world where only the surfaces of things are seen.

It is also characteristic of the philosophy of value that it tends to place all values beside one another on the same level, or at least, by its very essence, seeks a conception of value that might be applied to all values equally. This raises a problem. Is it legitimate, we may ask, to consider the idea of value as such, independently of any particular value? The idea of value is perhaps like the idea of Being there is only a unity of analogy between different values as between different beings, and the juxtaposition of all values is in itself an error and possibly even constitutes a denial of real value, since value always implies choice and preference.

We have already remarked upon the influence economics has had on the development of the theory of value. To this we may add the influence of historical considerations, which point to the changes in valuations at different times. A kind of relativistic theory of value also leads to a negation of real values.

It is true that some recent theories, such as those of Scheler and Jaspers, are not open to this criticism. But it applies to the great majority of the modern theories of value.

Let us first consider the attitude of the mind in the presence of values. As Plato observed, the first attitude of the mind in the presence of values is the consciousness that there is a desire in things. Every particular thing seems to aspire toward the complete value of which it is only a partial and imperfect embodiment. It is by a kind of deprivation of value that we become conscious of the presence of values toward which we have to strive. But this aspect of the Platonic theory is complemented by another, if we consider no longer the things that are filled with a kind of desire and striving, but the mind itself. The higher and more intellectual values come to us unsought. For example, while the value of food is connected with our appetite and ultimately with a feeling of need, this is not the case with regard to the values of beautiful colors or forms. Here, according to Plato, the fulfilment comes without any prior need.

Is there, then, in the feeling of value more activity or passivity? If we take things as they first present themselves to our consciousness, we may say that passivity is dominant, in the sense that value is something revealed to the mind, something that it receives. The mind is not conscious of creating value. No doubt there are instances in which value is created; for example, a painter may make us feel the value of a particular nuance in a landscape. Oscar Wilde has laid stress on this kind of artificiality of value. Nevertheless, the painter himself, when he first makes us feel that value, does not have the feeling of creating it, but rather of its being revealed to him.

Values ordinarily appear in a dual form: the beautiful and the ugly, the good and the bad. Moreover, each one of these pairs of opposites appears to be dominated by a supreme term. A hierarchy of values is constituted which culminates at a summit. The mind represents to itself an absolute Good or even an absolute Bad (although the latter is less certain) and establishes a hierarchy of relative goods.

Plato observed that we can never completely possess this absolute Good. Here an oscillation takes place between possession and non-possession.

Let us next consider the classifications of value. As we have observed, there is no value in general. We are always confronted with particular aspects of value—moral value, aesthetic value, et

cetera. And even these present themselves to us only in still more particular forms, as, for example, the value of this or that symphony or this or that painting; so that value is always found incarnated, as it were, in particular and concrete works and beings.

A first classification could be made by distinguishing between the values of taste (implied in such judgments as 'I like this dish'), the values of use (i.e. values that are means for attaining other values), and the values of ends, which would be ultimate values.¹ Even among these ultimate or terminal values we may distinguish what might be called the values of valiancy (courage), the values of goodness (which are the moral values other than courage), and the values of validity (truth).

There is also Scheler's classification, which distinguishes first the values of the agreeable (corresponding in a certain manner to what we have called the values of taste), next the values of life; then the aesthetic values, then the ethical or moral values, which, unlike aesthetic values, refer not to things or persons considered as things, but to persons considered in themselves; and finally the religious values. As can easily be seen, this classification itself implies a valuation.

In fact, however, a complete classification of values is never possible because each value, in order to be completely felt, has to be felt by itself and for itself, without comparison with any other value. Plato himself probably had something like this idea in view, for in the *Philebus* when he tried to define more precisely the supreme value, which he had called the Good in the *Republic*, he could describe it only by a kind of incomplete enumeration. So we are again led to ask whether the idea of value does not have its unity only in an analogy, in the similar relation of different terms.

What are the conditions of value? First, there are conditions that are in the subject, whether they are intellectual or affective or situated in the will. These three elements cannot, in fact, be separated from one another. At the origin of the experience of value there is at the same time an emotion and a judgment, which implies the presence of both intelligence and will. Although we have

¹ In order to characterize the ultimate Good, Plato sometimes used words that refer rather to utility. This is because the ultimate Good, according to him, is the foundation of utility, and real utility takes its meaning from the complete Good.

said that value is received rather than created, this must not hinder us from seeing that will is an element in value.

All this may be summarized under the name of interest, by which Perry understands the primarily subjective origin of value.

There are also objective conditions of value, such as rarity. However, rarity is a condition only of economic values. It may be questioned whether rarity is in itself a direct condition of purely aesthetic values. It is one of their conditions in so far as what is rare is some particular quality. The ideas of quality and value are very closely related to each other.

It would be interesting also to examine the relation of value to time and to see how antiquity as well as modernity, the old as well as the new, may be foundations of value.

We should have to take account of the relation of value to society and history. But if one insists too much on the social or the historical element in value, there is danger of losing and explaining away value itself.

We may allude here to the sociological theory of value, which finds in society the origin of values. This was, in particular, the idea of Durkheim. According to him, religious values, and indeed every kind of value, cannot be explained without taking account of the presence and activity of society. Yet even though this seems to be true of the origin of values, it does not constitute a satisfying explanation of the reality of value itself. It seems to be only a kind of historical approach to value, although we must acknowledge that in the idea of value there is always an implicit appeal to the approval of a social group. But this again manifests or expresses our feeling of value rather than constitutes value itself.

We may now consider the question of the essence of value. Let us begin by comparing the two opposed theories of Plato and Spinoza. According to Plato, we affirm value because there are, independently of our affirmations, values in the universe. According to Spinoza, things have value because they are agreeable to us. Such is the opposition between the objective and the subjective view of value.

We must first observe that when we acknowledge a value in some things, we have the feeling that this value does not exist for ourselves alone. This observation is merely a description of the

attitude of the mind in the presence of value; we do not mean to say that there are values independent of us, but only that we posit values as independent of us. Perhaps the apparent objectivity of values is purely an effect of a retrospective attitude of the mind.

What renders all solutions of the question of value difficult is that we have to preserve this idea of the transcendence of values and, on the other hand, to consider the recognition of values as a product of the choice and will of man.

Three thinkers may be taken as representative of the different theories of value held by recent philosophers. For Dewey and his followers, value is related to the needs and interests of the living organism. For G. E. Moore, there is a realm of values that is completely independent of the realm of facts. Moreover, he holds that values are unanalyzable, we can no more analyze goodness than we can analyze redness. The third doctrine, as much opposed to the biological theory of Dewey as to the logical theory of Moore, is that of Bergson. According to him, value comes from emotion, and the emotions that are the sources of value are above the biological level. By them we are united to the principle of life itself—a principle which, being above life, is the source of the ever-increasing expansion and freedom of morality and religion.

Each of these three theories is a description of one real aspect of value. In considering value, the human mind always has to take into account biology and, what is superior to biology, psychology, and even what is superior to psychology.

We shall probably have to reject the Socratic and Platonic affirmation that there are eternal values independent of space and time, but even if there is no Good in itself, there is what the Greeks called the good man or, in their own words, 'the beautiful and good man.' He is the individual creating, or rather living and being, values, even though he knows that there is no order of values that he receives from without or from above. He faces with courage and, we might say, with value this situation of being himself the source of values.

But there are certainly many difficulties in this conception, because man can never think values without thinking them as universal, and because, on the other hand, he does not need to have too clear a consciousness of being himself the source of values, for this is precisely what would diminish his value rather than aug-

ment it. So he has to have the feeling that values are revealed to him and that the source of this revelation is something in him that is deeper than himself.

There is value because the individual conceives an order that is different from himself and because he himself gives birth to this order by virtue of the active vision he has of it.

Value does not come to us from anything outside ourselves, except in the sense that we ourselves are outside ourselves. Indeed, it could be said that man is the creator of value, of sacredness, that it is man who sacrifices, in the etymological sense of the word, and we may even add that this creation of value is not independent of sacrifice in the current meaning of the word, because it is when he is willing to sacrifice himself to values that man creates sacredness.

Choosing our values is choosing ourselves, and *vice versa*. To be sure, there is a kind of paradox in the statement that the one having value chooses values, for what does it mean to say that he has value if there is not a preliminary affirmation of the pre-existence of values? But this is precisely the paradox of the constitution of values.

Thus, we have a kind of transcendence that does not come from a transcendent realm or a transcendent being. The man who has value chooses values and creates them by a kind of prepossession (as if he needed and even had them in a certain manner beforehand) and retrospection. And he does this ordinarily by starting from particular problems, becoming conscious by them of his refusals and acceptances.

We become conscious of values by our own particular reactions to persons and things, forming for ourselves what Scheler has called models and anti-models. By this last term he means that we very often become conscious of values through our attitude of refusal in the presence of some things that are opposed to the values we have not yet clearly affirmed. So it is by a kind of opposition to what denies values that we affirm values.

It is in these particular cases that value reveals itself with an irrefutable evidence that shows its transcendence. No doubt this transcendence and this appearance of universality is very difficult to admit—in fact, as difficult to admit as to reject. The simplest thing to do would be to deny it. But to do so would mean being

unfaithful to the ideal of achieving a description of our human experience. We have to try not to make this appearance of universality and transcendence disappear.

There has been much discussion concerning the relativity of values and their changes in time and space. But, in fact, there are some values that remain relatively permanent, because there are permanences and common characteristics in human nature, and also because value has a form, a kind of structure, quite visible, for example, in the form of duty that moral value takes.

Scheler has said that different regions of value appear to different men according to their position in time and space. New values would be the appearances of undiscovered regions which nevertheless exist objectively. But it may be questioned whether values constitute a really objective realm. Here we should still encounter a more general problem, namely, the relation between a general value like the Beautiful, for example, and the particular forms of the Beautiful. Are we to say that Rembrandt or El Greco discovered some pre-existing regions of the Beautiful; or would it not be better not to speak of the Beautiful in general, not to represent it to ourselves as a realm with different regions or as a house with different rooms, but to see in the Beautiful rather an idea having what we have called a unity of analogy, or, going still farther, a pseudo-idea, and to maintain only the different aspects under which what we call the Beautiful appears?

In one sense the theory of Jaspers is more satisfying than that of Scheler because he insists on the irreducibility of these different aspects of the Beautiful. He shows us that the affirmation of the one is the negation of the other, and that human thought, when it tries to imagine a common term among all these conflicting aspects, necessarily fails.

Still another question concerning value is whether it is relative only to form, as Kant maintained, or whether one has to take account also of the matter of actions, as Scheler says. Kant tried to show that when we speak of values, we do not consider the matter of the action or even the content of a work of art such as a painting, for example, but only a kind of formal arrangement. Applying this idea to human action, Kant tells us never to treat a person as a means only, but always at the same time as an end. And in art too there is a formal arrangement: every part of a paint-

ing is related to all the other parts, so that a kind of organism is constituted in which everything is both means and end. The moral act is the manifestation always of a respect for an end, and the aesthetic object is at the same time means and end, and a means only for a kind of immanent end. These characteristics of morality and beauty are purely formal. Though acknowledging the faithfulness of this theory to many of our judgments of value, we may question, with Scheler, the idea that no consideration must be given to the matter of the act or to the content of the aesthetic object. We have to take account of circumstances. Even the most abstract and formal rule of justice could not be formulated if we did not pay attention to the particular circumstances and to all that constitutes the matter of each case. It remains true, nevertheless—and this needs to be stressed in opposition to some so-called existentialist theories—that there are things to which we must say absolutely no under all circumstances.

Although we have insisted on the subjective element in value, we have to keep in mind that there is also an objective aspect of value. For example, it would be very difficult to question the affirmation that living beings are superior to non-living beings. So, having seen that value has some of its sources in the subjectivity of being, we may see also that it has an objective source in reality.

But we have to go beyond this separation of objectivity and subjectivity and arrive at a kind of primitive feeling or experience of value. At this level there is an infra-relational unity between the subjective and the objective. Value is not added to what is ordinarily called Being, but comprehended in it. And although there is something right in Alexander's statement that value is to color what color is to extension, we cannot place value on one side and existence or beings on the other. We cannot separate a painting and the value of the painting. There is a unity between the painting and its value, and even between the painting, its value, the painter, and the spectator. Here again relation is an intellectual translation of something that is beyond, or rather beneath, relation. And this beyond or beneath is that primitive feeling or experience of value which we have mentioned. It is in this sense that we may again encounter the idea of the ontological reality of feeling. It is the primitive union between man—or, more generally, living beings—and things

When Alexander mentioned what he called the tertiary qualities, he meant something like the reality of values. These tertiary qualities are no more illusory than secondary qualities, which in turn are no more illusory, and even, perhaps, are less illusory, than primary qualities. What is given to us is not a universe without any color—that universe of pure facts which we sometimes represent to ourselves under the influence of an abstract, mechanistic conception—but a world rich in many different kinds of meanings.

No doubt at every moment the mind transforms the unity of the world into dualities and pluralities. For mind is what makes diversity within unity as it makes unity out of diversity. But this work of the mind does not hinder us from affirming the mystical, yet natural, experience of value.

The existence of judgments of value can be understood only by supposing the preliminary existence of this experience of value. And if, when we reflect upon this experience, we always return to judgments of value, because we are judging beings, always transforming our experience into something reflected upon, it is nonetheless true that we are always sent back from the judgment of value to the experience of value.

So we have seen, successively, that there is an element of subjectivity in value, that there is in it nevertheless something that cannot be reduced to the subjective, that there is in things a reality of value, and finally that we have to go beyond the division between subject and object in order to catch a glimpse of the experience of value. In the presence of the problem of value the human being has to render his subjectivity keener, to keep the feeling of the transcendence and objectivity of value, to stress this tension between the subjective and the objective, and in the end to go beyond these two terms toward something that is deeper than they are.

There are always two dangers with which we are faced when we consider the problem of value: dogmatism and skepticism. Indeed, the latter is the product of the former, and there is always a contest between them. This also explains what has been called by Dupréel the precariousness of values: the higher the values are, the more precarious they are. Values are always menaced. In fact, our very reflection on values, and particularly on value taken as a general idea, as a kind of pantheon of values, is a menace to them. What

is important is not so much to reflect upon values as to reflect ourselves in them.

Instead of seeing fixed realities, which would be the Good or the Bad, we see only movements—movements perhaps not only of the human mind, but of the whole of moving reality as it is expressed or compressed in the human soul—toward the one or the other, ascending or descending, 'transascending,' we might say, or 'trans-descending' toward ultimate limits which the soul does not know whether it reaches or only imagines.

In saying that we pass from subject to object, then to the relations between them, and then to something behind the relations, and, in agreement with this last point, in referring to value as something beneath the subjective and the objective, we know that we are using difficult and abstract terms. Nevertheless, we use them to indicate a very simple fact; and this translation of the simple into a complicated philosophical language is a consequence of the nature of man, which here too can go toward the immediate only through mediation.

Value then appears to us as the extreme point of existence, where existence passes into something different from it and may even sacrifice itself to that supreme point.

THE idea of the soul has several different origins, among them dreams, apparitions, and breathing. Probably because of its identification with the breath of life, it was connected primarily with the idea of air.

If we try to follow the development of the concept of the soul in Greek philosophy, we encounter a difficulty arising from a duality of terms. One term, *psyche*, refers to breathing, and the other, *nous*, refers rather to the idea of mind and intelligence.

Anaxagoras, in depicting the world as governed by Intelligence, presented the first definite conception of a wholly spiritual principle. With Plato, the disciple of Socrates, who had been at first an enthusiastic reader of the book of Anaxagoras, the idea of the soul assumed greater precision. The *Meno* and the *Phaedo* base the proof of the existence of the soul on the necessity of affirming a kind of knowledge that is independent of experience; and this affirmation is symbolized in the idea of reminiscence. In the *Phaedo* particularly, the concept of the soul is linked with the theory of Ideas, although the soul is not an Idea, for if it were, there would be only one Soul. Plato bases other proofs of the eternity of the soul on its simplicity and on its essential relation to life.

In affirming the existence of the soul, Plato raised two questions, the first concerning its relation to the body, and the second concerning its immortality. The relation of the soul to the body he compared to the relation of a prisoner to his prison and also to the relation of a worker to his tools. Here we can already see a kind of ambiguity in the concept of the soul. In some of the following dialogues what had at first been attributed to the influence of the body was attributed rather to the influence of the lower parts of the soul.

As for the soul's immortality, the proof of which is, in fact, the main object of the *Phaedo*, Plato presented different arguments in its favor. He began with what appears to be the least convincing argument, that death comes from life and life from death, and passed to the more satisfying proofs based on reminiscence, to which we have alluded, on the kinship of the soul with the Ideas, on the simplicity of the soul, and on its kinship with life. But apparently Plato did not regard any one of his arguments as completely conclusive; only their conjunction may lead us, not to a quite definite affirmation of the immortality of the soul, but to the taking of the risk of this belief.

The simplicity of the soul, on which the *Phaedo* bases the belief in its immortality, may appear more questionable when one has read the *Republic*, for there Plato speaks of three different parts of the soul—the rational part, the passionate and courageous part, and the part that is characterized by desire. The soul thus appears as what Plato calls a very beautiful composite rather than as a quite simple thing. But he maintained that such a very beautiful composite may be preserved and kept immortal.

This separation of the soul into three parts is very clearly shown also in the *Phaedrus*, where the rational part of the soul is represented as a charioteer and the two other parts of the soul as horses. the first, the faculty of will, courage, or art, being obedient, or ordinarily obedient, and the other, desire, being disobedient.

Among the later dialogues we may choose in particular the *Theaetetus*, where the emphasis is on the activity of the soul, always discerning, comparing, and computing, and the *Sophist*, where the element of movement is emphasized, not only in the soul, but in the whole of Being and in the Ideas. Indeed, we might say that whereas in the *Phaedo* the soul was conceived on the model of the Ideas, in the *Sophist* the Ideas are conceived on the model of the soul.

The idea of the soul was probably from the very first connected with the idea of movement, since the soul was seen in the movement of breathing. And the soul was conceived as the origin of movement. We see in the *Sophist* how the soul was identified with movement, and Plato tended more and more to conceive of the soul as the source of movement. On this point he was to be followed by Plotinus and the Neo-Platonists. The more Plato developed his

system, the more he seems to have abandoned the asceticism of the *Phaedo* and its relatively static theory for a more dynamic conception with a greater accent on the positive aspect of the sensible world, which he appears to have completely denied at first. Finally, in the *Philebus* he tried to unite the affirmations of the unity and of the multiplicity of the soul, just as in the *Sophist* he had united the ideas of rest and of movement.

Aristotle kept certain of Plato's doctrines about the soul but transferred them to what he called the creative intelligence, which is distinct from the body and comes into it from the outside. On the other hand, he connected the other souls, inferior to this pure intelligence, much more closely to their bodily accompaniments or effects. According to him, there is a whole hierarchy of souls, of which the first we have named, i.e. the creative intelligence, is completely independent of the body. The others are defined as forms related to the sensitive, living or vegetative matter which they respectively organize. Of course, this changed completely the terms of the question of the soul's immortality. The creative intelligence will persist eternally, but the question is whether it will have any individuality or whether all the creative intelligences are not parts of one Creative Intelligence—a conception that would lead to the denial of the immortality of the individual souls.

The Stoics emphasized the voluntary element in the soul. They were materialists, but for them this was no reason for denying the activity of that fine and fiery element under the aspect of which they represented the soul. As for the Atomists, they held that the soul, like every other thing, is composed of atoms, but more polished and easily flowing. Perceptions come from the external world and imprint themselves—and this is the origin of the term 'impression'—upon the soul. With the Neo-Platonic and Christian philosophers, with Plotinus and Augustine, meditation on the soul took a more inward tone, which, indeed, was already present in some of the dialogues of Plato.

Descartes' conception of the soul is very different from that of Aristotle. Immediately after having said, 'I think, therefore I am,' Descartes asks, 'Who am I?' and he answers, 'A thinking substance, a soul, a mind.' Thus, of all the different souls that Aristotle had carefully distinguished and hierarchized, Descartes kept only one, the purely intellectual soul. He could not maintain the existence

of the others because they are forms related to some kinds of matter and he did not yet profess to know whether matter exists or not. Moreover, these different souls of Aristotle were a mixture of the spiritual and the material, whereas Descartes' chief concern was to separate these two realms of Being completely, keeping the one for spirituality and freedom, the other for mechanism.

Descartes affirmed not only that the soul and the body are logically separated, but that they are really separated. They are logically separated because at the moment when we say, 'I think; therefore I am,' we know by virtue of this very affirmation that our soul exists, whereas we do not yet know whether we have a body. Hence we can conclude that the knowledge of the soul is completely independent of the knowledge of the body. But this does not mean that the soul is really separated from the body. In order to establish the latter thesis, we have to take account of the distinction between conception and imagination. Moreover, and more metaphysically, once we know that God exists, we can say that everything we can conceive as distinct from another thing has been created distinct from it by God; and since we have a very clear and distinct idea of the soul as separated from the body, we may now say that the soul is really separated, because God has made it separate.

We find the same problem in Descartes as in Plato: How does it happen that this purely intellectual principle is also the principle that hates and loves, that desires, that is frightened, et cetera? This leads us to a question that is one of the most difficult for a Cartesian philosopher to solve: How does it happen that such different principles as soul and body are united at all?

Since he had effected a separation not only between the knowledge of the soul and the knowledge of the body, but between the soul and the body themselves, Descartes had to face the problem of the relation between them. The fact that they are related may be said to be proved by our faculties of perception and imagination, just as the fact that they are separated is proved by our faculty of conception.

But how can we understand the union between such different substances? Here Descartes resorted to different devices. Sometimes he said that there are between the spiritual and the material substances what he called *esprits animaux*, elements that partake of the nature of both and that put into motion a part of the brain

(the pineal gland). But one can easily see how 'uncartesian' is the solution of Descartes, since most frequently, and most logically, he denied such intermediary beings, such half-material, half-spiritual elements. Sometimes he seems to sketch a theory that was later to be more fully elaborated by Malebranche and the occasionalists. According to this theory, by virtue of the action of God, appropriate movements occur in the body on the occasion of certain thoughts, and certain thoughts arise in the mind on the occasion of certain events in the body. But this complicated solution is, as we have said, not completely developed by Descartes. The third and most astonishing solution may be found most clearly stated in some letters to Princess Elizabeth. As early as in his *Meditations* Descartes had said that the soul is not in the body as a pilot is in a ship, but is everywhere in the body. When he expounded his ideas on this subject more fully, he said that we must really imagine the soul as mingled with the body. He denied that occult qualities are present in the body, but, he maintained, our affirmation of them, although completely false in their case, is founded on a real experience, namely, our experience of the union of the soul with the body; and the soul pervades every part of the body precisely in the same manner as such occult qualities as gravity are represented as being in the bodies to which they are attributed. Moreover, in this part of Descartes' system the body is considered not as a composite of discontinuous parts of extension, but as a kind of whole, so that the whole soul can be united with the whole body. But although these reflections may help us to form some image of the union of the soul and the body, we can never arrive at a satisfactory theory about it because, very paradoxically for this great rationalist, Descartes recommends that we go to ordinary life and to ordinary conversation in order to grasp the nature of such a union, only this, and not philosophy, is our way toward the apprehension of the relation between the soul and the body. Naturally, many commentators on Descartes have seen in these passages a kind of contradiction of his own philosophy. It is not possible to deny the existence of a contradiction here; but does this contradiction represent a failure? It may be interpreted as showing that for Descartes there are very different kinds of knowledge and that the task of the philosopher is to distinguish them from one another and to have as rich and as faithful a vision of reality as possible.

It is not surprising that Spinoza, Malebranche, and Leibnitz, the three great followers of Descartes, should have found themselves confronted with this problem of the relation of the soul and the body. Spinoza represented the soul and extension as two attributes of the same Substance, God. It is for this reason that they correspond to each other. Each mode of the soul corresponds to a mode of the body. But the deeper we go, the more particular things, whether modes of thought or modes of the body, vanish and give place to universal thought and universal extension. We thus have a continuous ascent from the modes to the attributes and from the attributes to God, or from the modes to God, the Substance expressed in an infinity of attributes, of which we know only thought and extension, and in an infinity of modes.

According to Spinoza, the soul is the idea of the body. In what sense are we to understand this? Perhaps, as has been suggested by Wolfson, the term 'idea' is here an equivalent of the Aristotelian term 'form.' A problem remains, nevertheless. For in such a case one of the attributes would certainly seem to have a kind of superiority over the other, and the soul would be defined in relation to another attribute.

Malebranche developed the theory known as occasionalism, which, as we have seen, had already been outlined in some passages of Descartes. According to this doctrine, there are general laws in virtue of which events in one of the substances, spiritual or material, correspond to events in the other.

There is a curious difference between Descartes and Malebranche in their views concerning the knowledge of the soul. According to Descartes, the soul is the clearest of all things and the first thing we can understand. For Malebranche, on the contrary, while the objects of our thought are very clearly understandable—particularly the objects of mathematical knowledge, which implies the very clear idea of intelligible extension—the activity, if there is one, of our soul and its modalities are unknown to us. We see the intellectual light, but we who see it are plunged in a deep shadow.

Whereas Spinoza solved the problem of the soul by finally uniting particular thoughts in a universal thought, Leibnitz solved it by multiplying the souls, which he called the monads. According to him, there are not only monads of the mind, but monads of which bodies are the confused appearances. Nevertheless, the problem of

the communication between the spiritual and the material remained. In order to solve it, Leibnitz had recourse to the theory of pre-established harmony. He maintained that God has caused the movements of the soul and the body to be in correspondence with each other in the same way as a watchmaker regulates the movements of two or more clocks so that they keep the same time. Thus, neither one has a real influence on the other; both are regulated by the Supreme Being. But even Leibnitz did not feel completely satisfied with this theory, or did not feel that it maintained sufficiently the individuality of the individual as a composite of body and soul, and this is probably why he presented the theory of what he called the substantial link between mind and body.

We have observed the difficulties to which the rationalists of the seventeenth and eighteenth centuries were led by their theories of the soul. The other tradition of Western philosophy may be seen in Hobbes and Gassendi, the adversaries of Descartes. Hobbes thought that every real entity is a body. When Descartes said that soul is substance, Hobbes translated, in a manner Descartes evidently could not accept, 'Mind is body.' Hobbes argued that it is no more valid to infer, from the fact of our thinking, the existence of a substance that could be called 'thought' than to infer, from the fact of our walking, the existence of a substance that could be called 'walk.' As for Gassendi, Descartes remarked that he wanted to divide the spiritual substance into elements, just as the chemists divide their composite substances into simple ones; but the soul, according to Descartes, is precisely what cannot be divided, and knowledge of the soul must be a very different thing from knowledge by decomposition. It is a knowledge of attributes (imagining, conceiving, et cetera, and imagining and conceiving such or such a thing, et cetera).

A materialistic tendency can be seen in France in the eighteenth century, particularly in the work of La Mettrie. He based his theory of *l'homme machine* not only on observation of the influence of the body on the mind, but also on the idea that everything in the mind comes from sensation, on the Aristotelian theory that there is no form without matter, and on the Cartesian conception of animals as absolutely mechanical. According to La Mettrie, there is no radical difference between animals and man. In opposition to Leibnitz, who wanted to spiritualize matter, La Mettrie wanted to

materialize mind. But it must be noted that his definition of matter is very broad: matter possesses, according to him, not only extension and force, but also sensation.

We might also mention among the materialists Helvétius, d'Holbach, and Diderot. Diderot held that matter is in universal flux and circulation. For him, there are no precise limits between the different kinds of beings: every animal is more or less a man, every mineral is more or less a plant, every plant is more or less an animal. There are no definite kinds, just as there are no definite individuals. There is only one great individual, which is the Whole. And man is only a particular form of the organization of matter. Matter produces in him the instruments by which it is touched or seen (and seeing is a kind of touch). Matter makes the soul.

In opposition to all these philosophers we may place Jean-Jacques Rousseau. Rousseau felt the presence of his soul within him. His soul, he felt, was in communication with the Infinite, in the form of Nature and of the creator of Nature, God.

In certain respects we may regard Kant as a follower of Rousseau. But we must first consider him as a critic of that rational psychology which was implicit in the work of Descartes and Leibnitz. Like Hobbes, Kant held that the presence of a spiritual substance cannot be validly inferred from the fact of our thinking. Certainly there is in us an active spiritual principle, which Kant called the transcendental ego, the source of all our activity and thereby the source of the laws of nature, which are founded by the activity of the mind when it organizes phenomena. And there is also our empirical ego, which is the sequence of our different thoughts. But is there a spiritual substance? Kant contended that there is no means by which we can pass from the observation of psychological phenomena to the affirmation of a thing-in-itself that would be the soul. The whole of rational psychology, i.e. the study of the soul as a thing-in-itself, is founded on a fallacy. And, in opposition to Descartes, he maintained in certain important passages that the soul is not the first thing we know; in order to know it, we have to take account of external phenomena, because we can have a precise idea of what is within ourselves only by opposing its character to that of external things. Nevertheless, according to Kant, the practical reason makes possible and even obligatory the affirmation of the immortality of the soul. The practical-metaphysical fact

of duty implies the duty of believing in the immortality of a spiritual principle and consequently in its existence.

Maine de Biran pointed to the impossibility of our having a satisfactory notion of the soul if we do not set aside every material conception. On this point he may be considered a predecessor of Bergson.

At the end of the century that opened with the reflections of Kant and Maine de Biran, Bergson founded his affirmation of the existence of the soul on the qualitative and continuous character of the psychical. In his first work, *Time and Free Will*, he showed that we must set aside every consideration of quantity, discontinuity, and permanence if we wish to grasp the qualitative continuity for which he found the name 'duration.' His second work, *Matter and Memory*, is a vindication of the existence of the soul, based particularly on an examination of certain pathological phenomena relative to memory. Bergson demonstrated that the order in which our memories disappear either in normal forgetting or in amnesia can be understood only if we say that what is affected is not the memory itself, but the relation between memory and its material expressions. Our memories never disappear, they simply become powerless in some cases, incapable of expressing themselves in outward movements. His succeeding works enlarged the conclusions of the first ones. The *élan vital* may appear as a more and more comprehensive expression of what had previously been called the soul.

The neo-realists tend to diminish the importance of consciousness and thereby of the soul, since neo-realism may be defined as the product of a combination of behaviorism and James's theory of consciousness.

In Alexander and Whitehead there is an effort, on the one hand, to represent the soul as a quality, related to the body, but not reducible to it (since it is quite a new constellation of qualities), and, on the other hand, to achieve a kind of unity, somewhat as in the Leibnitzian system, among the many things that fill the universe, each one being a prehension and a perception of all the others.

Husserl and the phenomenologists, who would agree in some respects with Whitehead and the neo-realists, emphasize two points: the fact of intentionality, (i.e. that our souls are always directed toward things different from them), and the existence of essences.

We have reviewed in this historical sketch some of the questions that may be put about the soul. We could also have discussed the question of freedom, but this has been the subject of another chapter. We might mention too the importance which unconsciousness, in itself a contradictory concept, has recently acquired through Freud. In fact, it is not too much to say that from Plato and Aristotle to Freud, no decisive progress had been made in psychology.

And now, if we again take up the problem in its most general form, we must first observe the influence of the different doctrines upon one another. We might then say that the philosophy of Descartes is one of the origins not only of the rationalism but of the empiricism of the eighteenth century. It should also be observed how the difficulties of the rationalistic theories contributed to the development of materialistic theories and of the critical theory of Kant.

No one of the arguments of the rationalists seems conclusively to prove the existence of the soul. In this connection we may recall what Plato said about its immortality. there is some risk to be taken even after all the demonstrations. Similarly, Descartes said that in order to prove the immortality of the soul, we ought to have before us the whole of physics completed, so that we might know absolutely the qualities of the substance that is opposed to the substance which is soul and thereby see more clearly the properties of the soul itself.

It is not only about the immortality of the soul that doubts may be raised, but also about its existence and pre-existence. Kant very clearly exposed the errors of the rationalistic arguments in favor of the simplicity and substantiality of a thinking soul. Yet Kant himself may be said to have advanced an argument in favor of the existence of the soul by his emphasis on the activity of the self as the creator of the forms and categories, though he would no doubt deny this and maintain that it is only by the moral consciousness that we are able to affirm the existence of the soul.

Still, we cannot say that materialism is a more satisfactory theory. With regard to the question of the influence of the soul on the body, materialism has often been either a behavioristic theory, which reduces every thought to matter, or an epiphenomenalistic theory, according to which psychical phenomena are effects of

physical phenomena but cannot be the cause of any of them. However, it can easily be seen what an anomaly is constituted by epiphenomenalism when it admits the idea of effects that cannot in their turn be causes.

Behaviorism, by reducing everything to mechanistic movements, leaves no place for consciousness. And even if we accept the idea that the phenomena of consciousness are reducible to matter, we are faced with the question: What are the phenomena of consciousness? How do we know that there are such phenomena? Clearly, it can only be through consciousness. But we do not see what place the phenomena of consciousness would have in a purely materialistic theory. Materialism is the tendency to reduce to matter those phenomena which at first seem present only to our consciousness. This idea of 'being present to consciousness' cannot, however, be completely interpreted in a materialistic theory. Accordingly, it has been said that if materialism were proved, it would have no problem to solve, because consciousness would be absent from the universe. One could go even farther and say that in a materialistic world a materialistic theory (as well as a spiritualistic one) would be impossible.

If the materialist does not want to be an epiphenomenalist or a behaviorist, he can still be an advocate of the double-aspect or double-language theory and assert that there are two modes of expression of one underlying substance. But this theory is no longer a variety of materialism, since matter would be only one of two expressions of an underlying substance that would not be matter. In the same way it could be shown that neutral monism, as conceived, for example, by Russell, is not at all a form of materialism.

We have just seen that if materialism is the reduction of consciousness to matter, the idea of consciousness loses its meaning; but the idea of matter, on the other hand, does not acquire much meaning. How can we define matter? We can define it as that which is perceptible to the senses, but this is clearly not true. We can define it in terms of its purely mechanistic properties; but many scientific developments run contrary to this idea. We should probably be reduced in the end to saying that matter is not mind.

At this point we may recall Berkeley's criticism of the materialists, a criticism that has been renewed by Bergson. Matter, said Berkeley, is a very abstract idea to which nothing really corresponds,

because when we have taken from a thing all its properties, what remains? Probably nothing; and matter is nothing. In similar fashion Bergson said that one of the most convincing arguments against materialism would be the demonstration that secondary qualities are as real as primary qualities. So we should be led to accept an idea of matter very different from that of the materialists, since it would be a matter full of sounds and colors and even probably of images and sensations.

Our conclusion is, then, that in the formula, 'Consciousness is matter,' neither of these two terms can be clear for the materialists. Here it might be argued that our conception of materialism has been too restricted. There is not only a mechanistic materialism, but also a dynamic materialism, the materialism of the French philosophers of the eighteenth century; and there is even a dialectical materialism, as conceived by Marx and Engels and their followers. In fact, it could be said that when we have translated materialism into the formula, 'Consciousness is matter,' (i.e. not-consciousness), we have thereby provided a formula for a dialectical materialism. But it is questionable whether the conjunction of these two terms can have any meaning. If there is dialectics, there cannot be any materialism in the ordinary sense of the term. (As for the extraordinary meaning of the term, we may question whether it is any meaning at all. If there is one, there is probably no objection to adopting it.)

If dialectical materialism is the affirmation that there is a universal movement in things, we can very well accept it. But what is meant, then, by 'matter'? If the term has only a polemical value, as the denial that mind exists disembodied (and certainly there is no mind existing by itself), we should still have to see whether and to what extent this polemical meaning is useful and legitimate. But if it has a dogmatic meaning, we can only say that it is a kind of dogma without content.

Some of our observations in the preceding chapters may help us to see in what direction we can find a solution of the problems concerning the soul. We have seen that the two classical ideas of substance and of cause have to be criticized and in considerable measure changed. Accordingly, all the arguments concerning the soul, whether spiritualistic or materialistic, whether based on per-

ception or on the influence of the soul on the body or *vice versa*, are open to criticism. Neo-realism is probably a satisfactory first attempt to do away with the idea of cause in the explanation of perception. And as for the influence of the soul on the body or of the body on the soul, Whitehead's criticism of the Cartesian bifurcation of nature may have some value, for if the physical and the psychical are not completely separated, the question of their mutual influence will be completely changed. But it is not only what we have said about cause and substance that may be of help in solving this problem. Our observation that space is not that juxtaposition of points which the Cartesian philosophers and the Newtonian physicists imagined may lead us to conclude that the opposition between a purely spiritual mind and a purely physical extension is a fiction rather than a reality, and Bergson's theory that our perception is in the things themselves may be more faithful to reality than the other theories. Finally, what we have said of the faculty of transcendence within us, as seen on the one hand in reason and the creation of mathematical truth, and on the other hand in the creation of value, may help us to understand not only that the rationalists' arguments based on the universality of truth and values do not prove the reality of a mind existing in itself, but that the empiricists' theory likewise fails to take account of this self-transcending character of human understanding and valuation.

What we have said, particularly about substance, cause, and space, might lead us to a kind of materialism; but the feeling always remains that there is something like a quality, a unity, a value, which has to be preserved. Materialism tends more or less toward explanations in terms of quantity and ends in a kind of explaining away of values. If it did not, there would be no objection to materialism in its wider meaning except that the name gives a too restricted idea of the scope of the theory designated.

Moreover, this whole question of the soul is in a sense not so purely metaphysical as it first appears. Here we may make use of the distinction drawn by Heidegger between the ontical and the ontological. If we ask ourselves whether there is in our experience—taken, of course, in a very broad sense—anything like the soul, this is a question about the possibility of finding such an object; and it is not quite a metaphysical, or let us say ontological, question, because it is not the task of ontology to enumerate the particular

objects of experience. We may add also that the historical or anti-historical considerations concerning the origin of knowledge that have been combined with the problem of the soul might be separated from it with the help of the considerations we have presented concerning reason and value. As for the moral considerations, we should deny that the immortality of the soul is a postulate of moral thought, as Kant said in a part of his system where he was more eudaemonistic, not to say utilitarian, than was his wont.

The first of the foregoing observations will enable us to judge the statements of those philosophers who, like Plato and Descartes, have maintained that the body is only an instrument for the soul, or even only an obstacle to it. Bergson held that the body, though having a kind of repressive effect upon thought, is nevertheless necessary for the expression of our thoughts in the actual material world. Thus, the body, according to Bergson, is at the same time a means of expression and of repression. He thought that he had proved by scientific arguments the irreducibility of the soul to the body. But this is questionable. Science is always changing. The science of today is not the science of tomorrow, and we are always in danger of seeing conclusions based on science denied by a more 'scientific' science.

But whereas the explanations of science are always open to revision, the psychological realm, inasmuch as it is felt and experienced, is a realm in which being and appearance coincide. There is a unity here between what we experience and what is. This point was emphasized by Descartes when he affirmed the *cogito*, by Leibnitz in certain passages, and more generally by Maine de Biran, James, and Bergson. Husserl also maintained this thesis when he opposed things, with their different perspectives, and thoughts.

We have to maintain at the same time a deep oneness of the soul and the body and a transcendence of the soul in opposition to the body. Concerning the deep oneness, we may recall Descartes' statement that to conceive the union of the soul and the body is to conceive them as one substance. In almost the same manner, Maine de Biran, who had begun his philosophical career by clearly separating mind and body, finally concluded, 'Everything that belongs to man belongs to man as a whole, that is, to the living organism.'

As for the transcendence of the soul, we may also appeal to the testimony of Descartes and Maine de Biran as well as to that of Plato.

We have alluded to the question, treated by Plato and Descartes, of the unity of the soul. And just as we have to affirm both the oneness of the soul with the body and their separation from each other, so we have to affirm both the unity of the soul with itself and its multiplicity. Plato said that we must philosophize with our whole soul, and in fact, in Plato, the rational dialectics is accompanied by a dialectics of love. This dialectics of love is present, more or less explicitly, in the mystics. They speak of *le fond de l'âme* or *la pointe de l'âme*, that is, the extreme region of the soul where it communicates with the Deity. Plotinus described the mystical experience as the flight of the soul alone toward God alone. But without here raising questions concerning mysticism, we may simply mention that the affirmation of the existence of the soul is essential as a kind of symbol of what the poet means and tries to express. Wordsworth, Shelley (although Shelley was at times very near materialism), and Keats make us aware of the presence of an element that is not reducible to quantity, an element which, according to Shelley, is ever-moving, and according to Keats, ever-progressing in the 'valley of soul-making.'

This element that is not reducible to quantity can be called quality. Thus, the question of the relation between soul and extension could be identified with the question of the relation between quality and quantity. Some philosophers, like Plotinus and Bergson, have conceived quantity as a distention or dilution of quality. Bergson has also described quality as a concretion and condensation of quantity. On this point we might compare his theory with that of Alexander, who speaks of the emergence of quality from quantity. The question whether quality or quantity comes first is not so important for the moment as the affirmation of this relation between them. Naturally, it might be said that this is in a sense reducing quality to quantity, since the idea of concretion and condensation implies quantity. Evidently if one wishes to remain within the realm of pure quality, one cannot even speak of it, one must simply experience it.

Our final conclusion about the soul would be, then, that although we cannot say exactly what it is, because it escapes every definition

or formula, we know, nevertheless, by an intimate knowledge, that it is, if we mean by it simply this irreducible qualitative element in experience.¹ Whatever may be its causes (if we retain for the moment the idea of cause), whatever may be its constituents, it has a life and a meaning of its own, just as a painting or a symphony may be composed of many lines and colors and sounds and yet reveal itself as a unity, a value, a quality in which being and appearance coincide.

¹ Maine de Biran speaks of the immutable absolute, which, according to him, is the essence of the soul, but which only God feels and sees

AUGUSTE COMTE distinguished three stages of theological thought. fetichism, polytheism, and monotheism. According to him, these different stages characterize the theological period of human thought, which comes before the metaphysical period. But one may question this idea of a succession of conceptions of God; and Comte himself would acknowledge that there is no complete separation between the different stages and that, for example, some traces of polytheism or even of fetichism may be found in monotheism.

The origins of the idea of God are no doubt very diverse. There is the idea of God as present in Nature. We find it in Thales' statement that the world is full of gods, and in Xenophanes, when, opposing the contrary idea of the multiplicity of the gods, he pointed to the sky and said: 'There is one God.' Mythology was full of nature gods. The Bible represents God as speaking in thunder and lightning.

There is the idea of God as the organizing principle, the universal Intelligence, which controls Nature. Such is the God of Anaxagoras. This was probably also the Fire of Heraclitus, which orders all things according to a certain rhythm. And this is an aspect of the God of the Bible, who is the Creator of the universe. The Demiurge of Plato (and *demiurge* means worker) looks at the Ideas and forms matter according to his eternal models. Whereas ancient philosophers maintained that this universal worker works upon a pre-existent matter, the Jewish and Christian God creates *ex nihilo*. The God of Descartes is, in one of his aspects, such an organizer. He establishes the laws of movement. We find in Leibnitz the same conception of God as the universal geometer, who by His calcula-

tions harmonizes the interactions between the monads, which are the points of view He takes of the universe. The God of Malebranche prescribes the general laws governing the causes, which are only occasional. One form that this conception took, although not the deepest one, may be found in the Watchmaker-God of the English deists¹ and Voltaire. This conception of God as the organizer of nature has been criticized by Bergson on the ground that it involves a false analogy with human operations.

Some philosophers, and they are among the very greatest—Socrates, Descartes, and Kant—deny the validity of particular explanations in terms of finality. According to Socrates, there is a kind of blasphemy in trying to put ourselves in the place of God and to determine the reasons of things. The same argument may be found in Descartes. According to him, we have to take account, particularly in physical science, only of efficient causes. Nevertheless, there is a problem here, because Descartes represents God as organizing the relations between things and the human body in such a way that human existence may be preserved.

To be sure, explanations in terms of final causes may lead to absurdities, as we see in some writers of the eighteenth century, like Bernardin de Saint-Pierre. According to views such as his, the melon is divided into sections in order to be eaten at the family table, and the flea is black in order to stand out against the whiteness of the bed linen!

There is the conception of God as the creator of minds. We find this idea in Plato, in Descartes, and particularly in Leibnitz, who represents God as producing the monads by fulgurations and reigning over the republic of spirits.

There is in Descartes also the idea of God as the creator of the eternal truths. God is not only the creator of existences, but also of essences. Thus, whereas Augustine, Malebranche, and Leibnitz all saw the eternal truths not as created by God, but as the understanding of God Himself, they are for Descartes the product of His will.

There is the idea of God as the Aim of the world, attracting it

¹ One distinguishes between deism and theism. The God of the deists is an intellectual God, his existence proved by the organization of the universe, and his essence reduced, it seems, to mere intelligence. The God of theism is a personal God.

toward Himself by His very excellence. This is the God of Aristotle, although there is some obscurity here, because in his proofs of the existence of God, Aristotle sees Him also as the Prime Mover, but apparently the Prime Mover operates by his very attraction, so that the contradiction may be avoided.

There is the idea of God as necessary for morality. This is in fact the God of Socrates, the God of Jean-Jacques Rousseau in his *Profession de foi du vicaire savoyard*, and the God of Kant, who conceived Him as what he called a postulate of the practical reason.

There is the God of the pantheists—of Spinoza, who conceived God as Nature considered in its creative aspect (*natura naturans*) with its infinity of attributes, and of Hegel, whose God is identical with the evolution of the Idea.

The French thinker Vacherot has described at least one aspect of the Hegelian God in saying that God is the category of the Ideal. We find the same idea in Renan's statement that God is not, but will be. This may be compared with James's view that God is dependent upon our belief and our efforts, although the conception of God is quite different in Hegel and Renan on the one hand and in James on the other: for Hegel and Renan, God is a pervasive aspect of our experience and is even our experience itself taken as a whole, whereas for James, He is a very powerful help and friend who struggles on our side and for whom we struggle.

There is, however, one important difference between the views of Vacherot and Renan and the Hegelian conception: Hegel does not separate the ideal and the real, his God not only will be, but is eternally.

We may find pantheism already in the Stoics. Cleanthes said that nothing is vile in the house of Zeus, and, going still further, he called the universe the word pronounced by God. Finally, for the Stoics, the world is the pulsation of the Heracleitean Fire, in the form of which they represented God.

In opposition to this God of the Stoics, there are the gods of the Epicureans, who not only are outside the world, but are completely indifferent to it, living a serene life in the interstellar spaces.

Also by a kind of reaction against the God who is everything there is the limited God of John Stuart Mill, Renouvier, and

William James. According to James, God is man's friend and a great help in time of need, but He is not all-powerful.

There is the God of Malebranche and the deists, who promulgates certain general laws according to which all phenomena occur. This is the God of Kant also, who does not break the intellectual relation by which man unites phenomena. There is, on the other hand, the God who revels in miracles—the God of James, of the supernaturalists, of Pascal, and of Kierkegaard. According to Pascal and Kierkegaard, faith in miracles is itself a miracle, so that their supernaturalistic belief implies a theory of the grace of God. For Pascal, miracles are something like empirical proofs of religion, and at the same time they make an appeal to the heart. It is this idea of the heart which is central in the thought of Kierkegaard. Reality is not something that we have to observe objectively, but rather something with which we have to be in contact subjectively.

With regard to the question of miracles, we have already mentioned the idea that the miracle is visible only to the eyes of faith, and that faith itself is a kind of miracle. We may find something like this idea in one of the former writings of Edouard Le Roy, and also the idea that dogmas, in which miracles are implied, prescribe modes of action. This is, as we see, a psychological and pragmatic theory of the miracle—a doctrine that, along with other modernist doctrines, has been condemned by the Papacy as dangerous to the belief in miracles required by orthodox Catholicism.

A general observation may be made concerning this question of miracles. If one believes completely in the scientific scheme of the universe, miracles seem impossible. But if one does not believe in it completely, the possibility of miracles will not be any the greater, since a miracle has its meaning only by its negation of ordinary laws. To be sure, primitive peoples and the Jews of the Old Testament knew no such scientific schemes. Nevertheless, if they believed in miracles, it was also because they believed in an ordinary course of nature.

So the idea of a miracle implies on the one hand the belief in miracles, and, on the other, the belief in an order without miracles.

If we take this term in its etymological meaning, that is, something surprising, to be admired and wondered at, and at the same time in its broadest meaning, we find reference to miracles in a widely generalized sense in poets like Blake, Novalis, and Rimbaud.

For example, Blake tells us that there is an infinity in a grain of sand, and Traherne says that there is wonder everywhere. Novalis represents his hero as having in the presence of everything the impression that he has known it from eternity and, on the other hand, that he has never seen it before. But, of course, the idea of the miracle as a particular phenomenon vanishes in face of this idea of the universal miracle.

There is the God of Bergson, conceived as the principle from which the *élan vital* comes, a God who enjoys an eternity of life and whose Being is related to our being in the same way as our perception is related to the things perceived, for He is like a condensation of our durations and of all the durations into one eternal moment, if we can speak of a moment in eternity.

And there are still other modern Gods. There is the God of Alexander, who is the highest quality after all the qualities we can conceive. For every being there is always a quality immediately superior to the supreme one which that being knows, and it is this quality that is named God. Certain analogies might be traced between this idea of Alexander and that of Bergson, although Alexander's God is conceived as different for every stage of Being, whereas Bergson's God is the extreme limit which we see above every kind of Being.

There is the God of Whitehead, whose nature is to select among possibilities those which are to be realized. He may be compared, up to a certain point, to the God of Bergson, and still more, to the God of Leibnitz, although there is some question concerning the latter whether the possibilities that become actualities are not realized by their own weight.

To many or to all of these conceptions of God (except that of Pascal) may be opposed that of Kierkegaard, who conceives God as what he calls the Absolute Other, thus continuing in some measure the negative theology of the Neo-Platonists and their mystic followers. But what is particularly important is that for Kierkegaard the religious consciousness is our own subjectivity strained to its utmost by its relation to this absolute object. Thus, religious thought is for him essentially subjective thought, as opposed to all the objective considerations in the system of Hegel. Yet this subjective thought cannot, in fact, be understood without its relation to God, the unknowable object. And so we might say that this thought is

a relational thought and that it is founded on a relation to something that at first appears as objective. But this relation is felt from within, subjectively. Moreover, its unknowable object is ultimately without any relation to it (according to some passages), although sometimes Kierkegaard calls it by the name of Love, in accordance with Christian tradition. Because of the subjectivity of the relation and the unknowability of one term in it, we may maintain that for Kierkegaard religious thought is subjective

Diverse trends of thought start from or go in the same direction as Kierkegaard's. There is Otto's idea of God as the tremendous element outside the universe, Barth's idea of God as transcendent, and Jaspers' idea of God as the ultimate background of all our divergent experiences, which we see by the final failure of these very experiences. Finally, we may mention Heidegger, not as a supporter of the idea of God, but as one who, although very much influenced by Kierkegaard, does away with the idea of God and shows us man in his godlessness.

There are many different combinations of these diverse ideas of God. Plato is a very good example of a philosopher with two conceptions of God. We have alluded to the Demiurge of the *Timaeus*; but it can easily be seen that this is not a supreme principle, since above the Demiurge are the Ideas, which this universal worker copies. Indeed, there is a higher principle in Plato, the highest possible principle, namely, the Good as it is represented in the sixth and seventh books of the *Republic*—the intelligible sun, which is the cause not only of the growth of things, but also of the knowledge of them, just as the sensible sun, its symbol, is the cause of the growth in the universe and of the light which shines upon it.

We might say that these two Gods of Plato, the supreme principle and the Demiurge, are combined with each other and with the God of the Bible in the Christian tradition. For Christianity, the universal worker is also the principle of the Good.

In Descartes we find a combination of God as the principle of the rationality of Being and God as infinite Will. And, faithful to the tradition of Christianity, Descartes also represented God as the good worker, the perfect antithesis of the *malin génie* which he had imagined at the beginning of his *Meditations*. At the same time that He is Understanding and Will, the God of Descartes is Goodness. This character of goodness is still more visible in the God of

Pascal and Malebranche. The goodness of Malebranche's God is related to His intelligence. The goodness of Pascal's God is the expression of His heart; and, as we know, the heart, according to Pascal, is not related to reason, but is a pure principle in itself.

This idea of the goodness of God, so pre-eminent in Christianity, is already visible in Plato. In the *Republic* he tells us that we have to educate children in the idea of the goodness of God, and in the *Laws* he tells us in almost the same way that God is good.

We have already remarked that it is very difficult to make a complete separation between polytheism, monotheism, and, we might add, pantheism. In Plato the polytheistic conception sometimes reappears. In the tenth book of his *Metaphysics*, Aristotle speaks of the many gods of the spheres, whereas in some passages that are now ordinarily considered as earlier he speaks of one God. Hegel has said that in the Christian Trinity we find a union of unity and multiplicity and a vision of a real, rich unity constituted by integrated differences. In Renouvier, the adversary of Hegel, we find polytheism again. Under the influence of his friend, Louis Ménard, Renouvier had the idea that a polytheistic theory is more suited to democracy than a monotheistic religion, which goes rather well with respect for kings, and this idea was not without influence on William James.

So we find two kinds of combinations of monotheism and polytheism, the first being a rather confused mixture of the two theories, and the second, particularly with Christianity, integrating the diversity in God Himself.

This may lead us to the consideration of certain mystical theories that distinguish in the divine principle the Divinity, which forms the universe, and what the mystics sometimes call the Ground of the Divinity, the obscure background from which the Divinity issues. We find such theories in Eckhart and Boehme and also in Schelling.

As for pantheism, it is sometimes united with polytheism, as in the sentence of Thales we have already noted. On the other hand, it is sometimes very difficult to separate pantheism and monotheism completely. For example, it is doubtful whether the God of Spinoza is personal or impersonal. Although the great majority of the commentators would say (and probably they are quite right) impersonal, some would maintain that nothing hinders us from

affirming His personality. An analogous question could be raised about the God of Bergson. But whereas for Spinoza the most rational answer would be to state that his God is ultimately impersonal, for Bergson it would be more satisfactory to say that, although in *Creative Evolution* God is sometimes, at least in appearance, identified with the *élan vital*, in reality God is its source and is qualified by Bergson as the love of an infinite Person toward other persons and as the personal Creator of these persons, whom He wishes to love Him and whom He loves.

Although we have stressed the differences between the various conceptions of God that we have mentioned, there are some features common to them all. All those who define God as the organizing principle which controls nature, as the Creator of minds and of the eternal truths, as the chooser among possibilities, say that God is powerful and even all-powerful as well as supremely intelligent.

Naturally, we cannot include among the believers in the omnipotence of God John Stuart Mill, Renouvier, and James, nor can we include among the believers in the supreme intelligence of God those who would prefer to see Him only as the sum of all stages of evolution (although Hegel, identifying God with the supreme Idea, would maintain the supreme intelligence of God), or as the dark principle in things—something like the dark God of D. H. Lawrence.

As for the will of God, there are those who emphasize it, like Duns Scotus and Descartes (although Descartes maintains that will has no real priority over understanding), and those who see God as essentially an intelligence, like Malebranche and Leibnitz.

Plato said in the *Laws* that God is good. In fact, in the *Republic* he had called his supreme principle the Good. So we have to add to the two attributes of power and intelligence the moral attribute of goodness. However, we have to take account of the idea of some gnostics that the God of our world—a rather subordinate God—is an evil God, and also of the tendencies present in some poets and thinkers. Certainly in Dante the anger of God is subordinated to His love; but this does not seem to be so in some passages of Jakob Boehme, where the anger of God is put on the same high plane as His love, and at the end of the eighteenth century Blake maintained that the divine energy is even more active in evil than in good and that God is present in the tiger as well as in the lamb.

For modern philosophers one of the most important properties of God is His infinity. Notwithstanding certain affirmations of Anaximander, of Melissus, and later of Plotinus, the God of the ancients was a finite God, because they had the idea that what is well-rounded is superior to infinity, which was for them rather the property of matter. But with Christianity, and even with the Neo-Platonism of Plotinus, things changed, and we find not only in the Scholastic philosophers but also in Descartes the identification of the perfect with the infinite.

Most of the properties attributed to God by the philosophers are obtained by what the Scholastics called the way of eminence. By this phrase they mean that we take what we consider as perfections in man, such as power, intelligence, and goodness, and extend them to infinity. In this sense we may say that the idea of infinity is the foundation of all the other properties of God.

Against this way of eminence, and even against the general idea of God's attributes, some philosophers of mystical tendency have contended that we can really say nothing about the properties of God. We find ideas of this kind particularly in Dionysus the Areopagite, under the influence of philosophers like the Neo-Platonist Damascius, and in such works as the *Theologia Germanica*. Spinoza too, when he says that there is no more resemblance between the understanding of God and our human understanding than there is between the Dog star and a dog that barks, tends in the same direction. The mystics to whom we have referred say that God can be defined only by way of negation and not by way of eminence. Theirs is what is called negative theology. And we find in Fichte, at least in his later system, as George Gurvitch has shown, an application of negative theology to metaphysics. We might also cite some statements of Heidegger in which he identifies 'to be' with 'to be no being,' i.e. no particular being.

Let us consider again the different conceptions of God that we have described. We have already mentioned the properties generally attributed to God. Now, starting from them, we may study the different proofs of God's existence that have been presented. With the conception of God as the organizer of the world, one can pass from the observation of the world to the existence of God. Here we find two proofs: one has been called the cosmo-theological, the other the physico-theological proof. According to the former—

which was first advanced by Aristotle and has since been emphasized, among modern philosophers, by Leibnitz—because it would have been possible for the world not to exist, there must be, as the originator of the world, a principle for which it is not possible not to exist. This is also called the proof by the contingency of the universe. We may find a kind of equivalent in the theory of Whitehead that God selects among possibilities. From the actuality of the world we pass, according to Whitehead, to the idea of a real Being who actualizes possibilities, just as, according to Leibnitz, we pass to the idea of a necessary Being who accomplishes the same function. As for the physico-theological proof, it is founded on the affirmation of the impossibility of an infinite regress. If we seek the cause of any actual movement, and then the cause of the cause, and so on, we must stop at a certain point. And there we find the Prime Mover, who, according to Aristotle, moves rather by attraction than by efficient causality.

These two Aristotelian proofs do not imply at all the existence of a God who creates *ex nihilo*, but only an actualizer and universal magnet, as it were.

Neither of these two proofs could be accepted by such philosophers as Descartes and Kant. But their motives for rejecting them are very different. According to Descartes, we cannot start from the existence of the world in order to prove the existence of God because we are not at all certain of the former before we have proved the latter. This applies equally to the two proofs we have mentioned. And particularly as regards the second proof, we cannot be sure of the impossibility of an infinite regress. As for Kant, he opposed the Aristotelian proofs because they constitute a paralogism: they infer from phenomena the existence of a Being, namely God, who is a noumenon, and this constitutes an illegitimate passage from phenomena to noumena. Moreover, the very idea of the world as a whole is itself something that goes beyond phenomena and must be criticized as well as the idea of God. In the third place, and by virtue of the same distinction between phenomena and noumena, the categories of possibility, reality, and necessity are applicable only in the region of phenomena; their use for noumena is illegitimate. Thus, Kant questioned not only, as Descartes had, the temporal order in the argument and the necessity of stopping at some point, but the whole procedure of passing

from the existence of the world to the existence of God. Without questioning the details of the proofs, Bergson too undermined them in fact by his diffidence toward such logical processes as are involved in the first proof and toward such physico-logical affirmations as are presupposed in the second. The arguments we have advanced about modality in the chapter on freedom are also applicable here.

The God of Descartes and Leibnitz, i.e. the Creator of minds and their ideas, is the God whose existence is proved by the arguments Descartes formulated in his two proofs from effects. According to him, we discover in our minds the idea of the infinite. Whence can it have come? Who can have put this idea into our minds? Neither we, who are finite, nor any other thing in the universe. The idea of the infinite or of the perfect, which Descartes identified with each other, can have been put into our minds only by an infinite and perfect Being, who has left this innate idea in us like a sign or a seal. Descartes' second proof of the existence of God is only another form of the first. The first starts from the idea of God, the second, from the being possessing the idea of the infinite or perfect. Such a being cannot be produced by himself, for if I had had the capacity of producing myself, I should have been able to produce myself as infinite and perfect, that is, I should have been God Himself. Nor can I have come from a conjunction of causes, for such a conjunction could never have produced a being that would be in possession of the idea of the infinite or perfect. Nor can I have come from my parents, or at least my soul, which possesses the idea of the infinite, cannot inherit this idea from my parents, this would be no answer to our question, since we should still have to inquire how my parents received the idea. So, without resorting to the notion of the impossibility of an infinite regress, we may say that the idea of the infinite is in us immediately as the effect of the power of God.

Of course, Kant also criticized these proofs, inasmuch as they imply the affirmation of a self conceived as a noumenon. And, on the other hand, the empiricists question the existence in us of an idea of the perfect and the infinite, as Hobbes and Gassendi did in their controversy with Descartes.

As for the Prime Mover of Aristotle, we have already mentioned Descartes' observation that it implies a questionable denial of the possibility of an infinite regress, and it also has the defect, pointed out by Bergson, that it represents God as completely static and

ready-made. Moreover, all the arguments for the existence of God that are founded on the order of the world—what are called the teleological arguments—may be criticized on the ground that, as Kant has observed, even if we could infer from this order the existence of an intelligent and powerful God, we cannot infer an all-powerful God, because the perfection of the world is clearly only a relative perfection. Here again Bergson's criticism goes still farther, since, according to him, God does not have to put order into the world, there is always some kind of order in it, be it a mechanistic order or a vital order. If there is always some kind of order, what need is there, one might ask (although Bergson would not have asked), to resort to God?

If we criticize all these proofs, we are led to Bergson's conception of God as the origin, or rather the originator, of the *élan vital*, as the primordial source of energy and love. We shall return to this point later.

Certainly Kant's argument that God is a postulate of the practical reason gives expression to a need that is more or less completely fulfilled in rationalist philosophy since Socrates and Plato, who emphasized in the *Republic* and in the *Laws* the necessity of believing in God as a condition of morality. In fact, the whole of classical philosophy before Kant is the expression of what may be called our rational postulation of Being and Goodness at the root of the universe. The difference is only that Kant enunciated as a moral postulate—but, it must be noted, this moral postulate is a need of reason itself—what had been explicitly presupposed by preceding philosophers as the precondition of the fulness of the real and the richness of the universe. However, God as a postulate of the practical reason hardly answers to what our belief, when it exists, postulates; for what it demands is precisely that God be more than a postulate, even in the Kantian sense.

So far we have not been satisfied by the proofs of Aristotle, founded on the physical world, or with the first two proofs of Descartes, founded on the metaphysical world, or with the proofs of Kant, founded on the moral world.

We have said that all the properties of God are based on the idea of the infinite, which permits us to extend properties without limit. Here we may find a logical proof of the existence of God, indeed even more purely logical than the physico-theological proof

based on the impossibility of an infinite regress. This last logical proof of God's existence has been called the ontological argument. It was formulated by Anselm. If the perfect Being, or the Being greater than all others, did not exist, He would not be the greatest or most perfect Being, since we could conceive a Being who would have the same perfections and who would moreover exist, which would render the first Being imperfect when compared with this perfect and existent Being. Descartes made use of the same proof when he said that in order to be completely perfect, the perfect must exist. This proof may admit of different interpretations in the philosophy of Descartes, according as we emphasize its logical aspect and consider essence as the reason or the cause or nearly the cause of existence, or the almost mystical aspect of the argument and consider, in Neo-Platonic fashion, that a superabundance of essence overflows into existence. But let us take the logical aspect. Already during the Middle Ages the monk Gaunilo had criticized Anselm because, he said, it is not a reason for the existence of a thing that we conceive it as existing. The Happy Islands do not necessarily exist because they are perfect. However, this argument could be easily criticized in its turn on the ground that the Happy Islands are only a material thing. Nevertheless, it is an argument that contains within itself the germ of the true argument, which Kant gave us.

The ontological argument was not recognized by Aquinas as a valid proof of the existence of God; but Descartes saw in it a proof by the essence, which could complement the two proofs by the effects. In fact, however, he seems to have preferred the latter, and the proof by the essence, which he gave in passing as a kind of supplement, is important to him chiefly because he believed that it shows very well the identity between the formal cause and the final cause. But Kant maintained that not only the proofs of Descartes, but all proofs of God's existence are ultimately founded on the ontological argument. According to Kant, if this argument is unconvincing, the other proofs, which are implied by it, thereby lose their force.

In agreement on this point with certain critics of Descartes' proofs—for example, Arnauld and various theologians—Kant contended that what is proved by the ontological argument is that we cannot think of God as not existing, i.e. that the existence of God is

inseparable in our thought from His perfection; but this inseparability in our thought does not prove the inseparability in reality. Our not being able to think of God as not existing is not a good reason for concluding that God exists. Moreover, according to Kant, there is in this whole argument a presupposition that misrepresents the idea of existence, for existence is conceived as a perfection, as if, enumerating the perfections of God, we could say that He is wise, good, and existent. Now clearly existence is not an attribute like wisdom and goodness. 'Wise' and 'good' are predicates, whereas 'existent,' even though it has the appearance of a predicate, is not in fact a predicate. Existence is rather the positing of a subject. Let us take the famous example of Kant: on the one hand, we have the concept of ten dollars and on the other ten real dollars in our pocketbook. Conceptually, there is no difference between the ten existing dollars and the ten conceived dollars. The only difference is that the first exist, whereas the ten conceived dollars, with exactly the same properties and perfection, do not. According to Kant, the whole of classical rationalism is vitiated by the treatment of existence as analogous to other qualities. And this point is important because in the ontological argument is formulated the whole of classical rationalism, in which reality and perfection are equated: the existence of the highest perfection is taken as necessarily being the highest reality, and the highest reality as being the highest perfection. For Kant, existence, as we know it, is phenomenal existence, i.e. existence inside the framework of human experience.

The validity of Kant's argument was in its turn questioned by Hegel, who thought that Kant had failed to see the real gist of the ontological proof. Hegel's whole theory is a developed and protracted form of the ontological argument.

Nor does the history of the ontological argument stop here. Kierkegaard took issue with Hegel and again separated essence from existence.

So the logical argument has not proved on the whole more satisfactory than the physical, the metaphysical, and the moral arguments for the existence of God.

But, after having said that all the properties of God are founded on the idea of the infinite or the perfect, we have seen that some philosophers and religious thinkers have taken exception to the whole idea of divine attributes and have contended that God

properly has no attributes. This is negative theology. When Kierkegaard emphasizes the existence of God, he does so precisely in the sense that God is a *that* (to use the expression of Bradley) without our being able to say *what* He is (although, as we have mentioned, Kierkegaard knows at the same time that God is Love)

Kierkegaard thinks that there are really no proofs of the existence of God. According to him, it is a kind of impiety in us to seek proofs of God's existence, because to do so is like saying that we doubt His existence and need proofs to be persuaded of it.

For Kierkegaard, as for Pascal, the proofs of God's existence are useless. They are too complicated, said Pascal. Kierkegaard goes even farther, saying, as we have seen, that they imply a kind of disbelief. Both Kierkegaard and Pascal accept revelation as the basis of their belief in God. Naturally, the question might be raised whether this does not mean simply the acceptance of the authority of the written word in the Bible, and also whether there is not a tension in the minds of Kierkegaard and Pascal between their will to acceptance and a kind of implicit rebellion against this very acceptance—a tension that gives their work the special value it has for us.

Whereas Pascal, Kierkegaard, Hamann, and many others have based their religious ideas on revelation, James bases his own faith on religious experience, which is, to be sure, also a kind of revelation. Here again we are confronted with the question whether we can place complete trust in the expressions of the mystics. The test of James is ultimately the fact that these revelations heighten the mind and expand it into wider regions.

So, having surveyed all the kinds of proofs of the existence of God and having stopped at the religious experience of James and the revelation of Kierkegaard, we return to something similar to what we found at the beginning in Thales' statement that the world is full of gods and in Xenophanes' statement, made as he pointed to the sky, that there is one God, or, later, in Bergson's reference to the source of the *élan vital*. But, after considering the conclusions of many other philosophers, we see in these formulas of Thales and Xenophanes not only the object (the world, the sky), but also the intensity of the subject affirming, even more than objectivities, his craving for—something.

Notwithstanding Bergson's criticism of the idea of disorder, and

indirectly of the idea of the creation of order, we can very well keep these ideas and consider them as leading us to the thought of God. Indeed, the Bergsonian theory would in no way be opposed to such an interpretation. On the one hand, there is the material order, as exemplified in the sky to which Xenophanes directed his attention and to which Kant alluded when he said that the two most sublime things are the starry sky above our heads and the moral law within our hearts; and on the other hand, there is the vital order, which has been conceived by Bergson more clearly than by any other philosopher. Instead of explaining this vital order in terms of mechanical or teleological causes, Bergson accepts it as it appears, like an urge inside nature, but coming perhaps from outside nature, at least as it is ordinarily conceived. And above the physical and biological orders, we find the order that has very often been described as the realm of religious experience and which perhaps is simply the heightened consciousness of what is highest in us. This is the One of Plotinus. The consciousness of this highest realm of our experience is made acute in the Kierkegaardian subjectivity.

Starting from all these different points of view—physical, biological, mental, and supra-mental—we arrive at a definition analogous to that of Alexander, which we have already mentioned. God is the quality that immediately follows on the highest quality we know. So, having gone to the extreme of subjectivity, we find once again a kind of objective definition of God.

The highest quality, or rather, the quality superior to the highest one we can conceive, is God, says Alexander. We can keep this formula, though it perhaps puts God too much in the future, and not enough in the present, and explains God too much as a quasi-objective Being. We conceive above the true, the good, and the beautiful something that is their source and principle—what Plato called the Good, the One above the essence.

On the other hand, according to the subjectivism of Kierkegaard, God is the Being in relation to whom I am most intense. He is defined by the intensity of my subjectivity.

Yet this subjectivity can never be so intense as when it touches objectivity—what Kierkegaard calls the Absolute Other.

But, for Kierkegaard, this Absolute Other in its turn is an infinite subject.

So we pass from quality to intensity, from subjective intensity to the object, from the object to the subject. From here we could go either to an interpretation of the Schellingian type (the philosophy of indifference: God is neither this nor that) or to an interpretation of the Hegelian type (God is both this and that because he is more than either of these two terms)

Nowhere has this dialectics appeared in a clearer and more brilliant light than in the *Parmenides* of Plato. In the beginning Plato shows us the One that is so purely one that we cannot express it or think it; not only is it not in space and time, but it is not One, and finally is not. Then there is the One that is, and this means a One that has in itself a duality, because it is One and it is Being, and even a multiplicity, indeed an infinite multiplicity, because this duality generates a multiplicity without end. Disregarding for the moment the precise manner in which the first One turns into the second (in what Plato calls that 'astonishing' thing, the instant) and the manner in which order is finally brought into the chaotic appearance of the second One (by means of Plato's conception of a unity that is not opposed to multiplicity, but orders it, as the Ideas order the subordinate sensible things), we may emphasize particularly the opposition between transcendence and immanence presented in these first two hypotheses of the *Parmenides*. Yet these ideas are not opposed; for when we think of God, we unite them with each other, thinking at the same time that God is above everything and that we live, move, and have our being in Him.

God may be conceived at the same time as a resisting element and as a uniting element. We have already encountered these two ideas in our study of things, persons, and values, and also in our study of Being and Existence. Here, in the notion of God, these two conflicting and united ideas meet once more in a heightened form. Positive theology and negative theology, when taken in their reciprocal complementarity, illustrate this heightening and this union of the two notions. In this sense, God is the completion of Being and Existence, as well as the summit of the hierarchy of things, persons, and values, or at least, we reach our highest point when we are in contact with the Other.

Antithetical thoughts concerning the essence of God may be followed by antithetical thoughts concerning the existence of God.

What we have to consider now is no longer the different conceptions of God, but the question whether or not God exists

Nietzsche is the most powerful proponent of the idea of atheism. According to him, we are in a world without any meaning. Events recur in aimless circles. There is no transcendence.

But Nietzsche does not stop here. He conceives of the Superman—an idea not so far from Alexander's idea of the next-to-the-highest.

Will man one day be strong enough to keep the idea of transcendence, but to keep it as meaning what the word really means, namely, mounting toward (which is close to the idea of emergence), and to keep at the same time the idea that immanence is sufficient? To strive within humanity toward a superhuman element by which in fact man is man and humanism humanism, to emerge from emergence and in emergence—this does not seem impossible.

Perhaps it is not necessary to keep the three-letter word 'God' to signify this. But at least we may say that man is man only if he sees something superior to man (be it a value, a person, or a force), and only if he sees this something not as a refuge—the God of the weak, the God to whom Maine de Biran addresses himself so often in his pathetic desolation—but rather as a force, a strength-giving as well as a crushing force, and a force that is in man himself.

Paraphrasing some words of Heraclitus, we might say that the gods grow from the death of men and men from the death of gods, and they live by each other's life.

If a philosopher is asked whether he believes in God, he cannot make answer at once. He must ask what is meant by 'God.' He has to travel through the forest of affirmations, doubts, denials, interpretations. His belief in God implies all these preceding moments. There are, of course, easier ways of reaching God. The philosopher's way is not superior to the more naive way; but it is not necessarily inferior. It is simply the philosopher's way.

Most of the problems of philosophy have been studied and discussed for many centuries in their bearing on the idea of God. The debating of such questions as whether God is personal or impersonal or whether He is purely One or includes in Himself a kind of multiplicity and, as in Christian theology, a procession of Persons related to one another, has led to the clarification (and some-

times to the confusion) of these ideas of personality and unity. There has also been the question whether God obeys rational laws or whether he makes these laws. This leads us to the problem of freedom in its relation to God. Here, as we have just seen, we first encounter the problem whether God creates the eternal truths or whether, as Augustine, Malebranche, and Leibnitz believed, they constitute His understanding. There is too the problem of reconciling the omniscience of God with human freedom. Some theologians have suggested that God does not, in the proper sense of the term, foresee human actions, because, being over and above time, He sees them without any succession of moments. But would this save the freedom of man? This may be doubted, and that is why Bossuet said that we simply have to keep in our hands the two ends of the chain, the freedom we experience in ourselves and the omniscience of God of which we are also convinced, without troubling ourselves about the manner in which they are united. Another and more audacious solution has been proposed by Lequier, and taken up by Renouvier and by James, in his formula: 'Man deliberates and God waits.' Thus, there would be unpredictable things even for God. But then one would have to adopt a theory in which a succession would be conceived within eternity itself—an idea that has been affirmed by some mystics but which is naturally very hard to understand.

The problem of the value of the world has been studied in the form of what Leibnitz called theodicy, i.e. the justification of God. Why is there evil in the world? In studying this problem, Leibnitz distinguished three forms of evil. Metaphysical evil is merely the limitation essential to creatures and cannot be avoided; since God wanted to create a world, He knew that that world would be composed of limited creatures, in contradistinction to His own infinity. Physical evil is very often the consequence of moral evil and sometimes is useful not only for our own moral education, but also for our enjoyment of pleasure, because, according to Leibnitz, the best melodies do not go without some dissonances. Moral evil comes from our freedom; as Descartes and many others before him had said, God preferred to give us freedom with its possible bad consequences rather than to render us perfect but without any freedom (and moreover, by virtue of the existence of metaphysical evil, we cannot be perfect). The conclusion of all this is that our world is

the best of all possible worlds—a conclusion challenged by Voltaire in *Candide* after the earthquake at Lisbon (as well as the train of his own reflections) had shaken his optimism.

The pantheistic conceptions of God, such as those of the Stoics and of Spinoza, are even more necessarily linked with optimism than is the conception of Leibnitz, except where they are willing to free themselves from any conception of good or evil. We have mentioned the Stoic thesis that there is nothing vile in the house of God. According to Spinoza, everything is the development or expression of the attributes of the infinite, and the defects we see in the universe are only the products of the fragmentariness of our points of view. For Hegel, evil is only a necessary step in the development of the Idea, and unhappiness is a stage necessary for the attainment of the deepest happiness.

Philosophers like Renouvier and James have seen in this optimism an argument against pantheism, for if everything is good, nothing is really good, and a monistic view of things, according to them, would diminish the moral sense, if not abolish it altogether. We may find suggestions of the same idea in Kant's struggle against the Leibnitzian monadology. Kant took as his foundation the Christian idea of original sin interpreted as radical evil.

In opposition to optimism we find the pessimistic theory of Schopenhauer. But although he says that the Will at the bottom of the universe is always striving toward ends that it cannot attain and which limited creatures can attain even less, deceived as they are by this Will of Nature, there is in Schopenhauer a place for a contemplation that is devoid of pain. So Schopenhauer's pessimism is not complete. We may find perhaps a more complete pessimism in E. von Hartmann or in poets like James Thomson or in novelists like Thomas Hardy.

If we think about the doctrines of Schelling and Schopenhauer, we shall see, as Royce has noticed, that the same theory may be taken in an optimistic or in a pessimistic sense, according to the manner in which it is considered. What is a triumphal march for the one is a succession of disappointing failures for the other.

The philosophies of Alexander and Whitehead are optimistic. As for Bergson, his optimism is obvious. Nevertheless, it may be noted that there is a kind of pessimistic background to his philosophy, since the *élan vital* encounters many failures and has to divide

itself into divergent tendencies, and since society—or at least what Bergson later called ‘closed’ society—is an obstacle for the free expansion of our interiority. But ultimately he thought that by means of intuition the divergent tendencies may be reconciled and that an open society is possible.

We have considered monadistic and monistic optimism, then pessimism, and then doctrines that may be susceptible of either optimistic or pessimistic interpretations. We may conclude by mentioning a theory James has called, using a name borrowed from George Eliot, ‘meliorism,’ i.e., the doctrine that the world is not in itself good or bad, but that by our faith and our effort we may make it better and better.

Thus, all these problems have been discussed in relation to God. This is natural, not only because of the religious tendencies of many philosophers, but also because God was conceived as the supreme reality and truth of the universe. By their proximity to the idea of God, the problems of philosophy sometimes took on a depth they would not have seemed to have otherwise; and human thought has matured in this theological environment, sometimes through it, sometimes against it. Nevertheless, all these problems have to be taken in themselves, examined piecemeal, and only afterwards put into relation with the Perfect, the Infinite, the One, the Absolute, and the Transcendent.

DESCARTES identified God with the perfect. Indeed, the two ideas had already been linked in Plato and Aristotle.

Formulating the Cartesian conception of God in his own system, Leibnitz considered it necessary to demonstrate that all the perfections that are attributed to God agree with one another. This he proved by arguing that perfections are always positive and that nothing completely positive can be in conflict with another positive thing.

However, this idea of perfection does not seem to be the most satisfactory equivalent for the idea of God. It implies the rationalistic affirmation of the equivalence of goodness (or value) and truth. Moreover, there is always the question whether this idea of perfection is as positive as it appears to be. To be sure, for the rationalists, perfection comes before imperfection, as the infinite comes before the finite. Admittedly, to say that something is imperfect is to say that it falls short of perfection. Yet is not this idea of perfection itself constituted by a negation of the particularities of experience? They are felt or thought of as deficiencies because we conceive the idea of perfection, but this idea is itself created by a negation of the imperfections. Thus, we might say that what is proclaimed by rationalism is the superiority of the pseudo-positive over the real positive, i.e. the particularities of experience, which only look as if they were negative because of the reflection upon them of this pseudo-positive that we have created.

It should be noted that the word 'perfect' literally means perfected and corresponds to what Aristotle meant by 'entelechy,'

that is, something achieved and completed. It means something very near what we should now call the emergence of the perfect from the imperfect. In this sense, it runs counter to the rationalistic affirmation that the perfect is prior to the imperfect.

Descartes, who calls God perfect, also calls Him infinite. We may say that in this respect his philosophy is characterized by the union of these two ideas.

The concept of the perfect has appeared as a metaphysical-moral concept. The two ideas we shall now study, the ideas of infinity and of unity, are related to the realm of quantity, even if they seem to negate it.

We have already said that for the most part it was with Christianity that the idea of the infinite became an equivalent of the idea of God. For among Greek philosophers only Anaximander, Melissus, and Plotinus conceived of the world, or the whole, or the principle of the world, as infinite. We have already stressed the importance of oriental thought as well as of modern science for the development of the idea of infinity.

For the Greeks in general, infinity and imperfection went with each other much better than infinity and perfection. This may be inferred not only from Aristotle's very severe and unkind judgments upon Anaximander and Melissus, but also from the whole polemic of the Eleatic philosophers against continuity, which was considered an aspect of infinity.

When the idea of the infinite assumed such importance in modern times, it had to be distinguished from the idea of the indefinite. Accordingly, it could be maintained that when the ancient philosophers disparaged the infinite, what they really had in mind was the indefinite. The same could be said of the empiricist philosophers of modern times, who contend that the infinite is a pure abstraction and a negative idea.

Descartes drew a sharp distinction between the infinite and the indefinite. The one is without limitation from any point of view, the other is unlimited only from the point of view of quantity. The one is something perfected, the other is the mere transition from something to something else. It is the same opposition that Hegel characterized when he put on the one side the good infinite and on the other side the bad infinite, i.e. a perpetual progression or

regression without aim or accomplishment. Recalling the terms used by Aristotle, we may say that the infinite is related to actuality, the indefinite to potentiality.

Starting from the difference between the infinite and the indefinite, Descartes reserved the term 'infinite' for God, leaving the term 'indefinite' for space and time, although in some passages he does sometimes allow them to be described as infinite.

For Malebranche and Spinoza, the successors of Descartes, space becomes an attribute of God or God Himself considered from the point of view of the relations of His creatures to Him. Hence, for these philosophers, space is infinite.

With Kant space and time are no longer considered as attributes of God, but as forms by which the human mind perceives things. Nevertheless, these forms are as infinite as space was for Spinoza and Malebranche. All finite space is part of infinite space. This is true particularly for the Transcendental Aesthetic, in the Transcendental Analytic Kant shows how these infinities are constructed little by little by the synthetic process of the mind. Thus, what appeared as the infinite continua of the Transcendental Aesthetic reveal themselves as constituted by the mind, without thereby losing their character of infinity.

The affirmation that the forms of space and time are human forms allows Kant to solve the antinomies. In the antinomies there is a conflict between the mind's pursuit of indefiniteness and its need for the finite. The idea of the infinite is not present in the antinomies, at least in the first two, but only the conflict between the indefinite and the finite. Must we say that the present moment is preceded by an indefinite number of moments, or by a finite number? (In the latter case, we should have to say that the world has a beginning in time.) Kant shows that neither of these solutions is satisfactory. In the first place, if at the present moment there is behind us an indefinite number of moments, then at the next moment there will still not be any greater number of moments behind us, which is absurd. Secondly, an indefinite number of moments can never have elapsed, precisely because it is indefinite. Finally, the number of moments is not indefinite in both directions because, even if we could always go backward, we should still have to stop at the present moment; thus, an infinite progression in the direction of the future is impossible. Kant uses analogous

arguments to prove that it is impossible to divide things *in infinitum* and to divide them into ultimately indivisible elements, i.e. atoms or monads. As we have seen, Kant finds the solution of these antinomies in the affirmation that space and time are infinite forms, but within the human mind. The idea of transcendental infinity allows us to escape the difficulties not only of objective indefiniteness but also of objective finitude.

Of course, the infinite appears in still another aspect in the system of Kant when he treats of God. But of this infinite we can say nothing if we rely on the theoretical reason alone.

Hegel saw infinity in the very passage of the mind from one alternative to the other. In Hegel there is no longer an absolute separation between the mind and things, as there was in Kant. The very passage of the mind constitutes things. The world is infinite because it is the same as the mind in its constant movement. Transcendental infinity is replaced by the passage from infinity to finitude, a passage that is itself infinity. The antinomies cease to be difficulties and become a particular expression of the infinite movement of the eternal and at the same time historical mind—what Hegel calls the Idea.

Such a solution, which is a negation of the Kantian presuppositions, was opposed by Renouvier. Romantic philosophers like Schelling had chosen infinity; Hegel had chosen a union of finitude and infinity, a union itself passing into infinity. Renouvier chose finitude. He accused all the other philosophers of pantheism; and pantheism, according to him, leads to a denial of personality and freedom. All the doctrines of the infinite he called doctrines of the thing, in contradistinction to the doctrines of the finite, which are doctrines of the person. James's theory on this point came in part from that of Renouvier. But Renouvier's Pythagorean presupposition that the terms always have a definite number—what he called the Law of Number—may be questioned.

While James proclaimed himself a disciple of Renouvier, Royce, his colleague at Harvard, was a disciple of Hegel. He tried to give a new formulation to the idea of the infinite. Inspired by the investigations of modern mathematicians, he defined the infinite as a self-representative system. According to him, what gives us the most satisfactory conception of the infinite is the idea of a map so big and clear that it would contain the whole universe, including

the room in which the map is, and finally the map itself. An infinite consciousness would be something of the same kind. Royce united this idea with the idea of the absolute self as a society of selves.

The same conception of the infinite has been used by Bertrand Russell in quite another context in order to refute the arguments against infinity.

On this question of infinity Bergsonian philosophy is opposed at the same time to Kant, to Hegel, to Renouvier, and to Russell. For Bergson, the infinite forms of the Kantian understanding do not correspond to any reality, except the decayed reality toward which a part of the world passes in its descent toward matter. The rational processes that Hegel depicts are also very far from the Bergsonian intuition. As for Renouvier, he is completely mistaken in his Law of Number, which does not take account of the continuity of the real. And the mathematical representations of Russell are no better than those of Renouvier. The relation between the infinite and the finite may be understood if, turning once again to the sophisms of Zeno, we say that analysis into finite states always involves a falsification of real movement. The movement of an arrow is something that cannot be divided, if it were, it would become two movements instead of one. It is something we may call infinite and absolute. Now what the Eleatics have done for movement is what intelligence always does in the presence of the continuous wholes that constitute the universe. And we also see the close relation between the ideas of the finite and the indefinite in their common opposition to the infinite. There must be an indefinite number of finite points of view in order for us to have the equivalent, but only a false equivalent, of infinity. These points of view, finite in their essence and indefinite in their number, are always something external. True infinity is interiority. Hegel might have said something like this, but his infinity is a rational one, an integration of ideas into larger and larger ideas, whereas the infinity of Bergson is a felt infinity, the continuous flux of our spiritual life, and of life in general, which is itself spiritual. Infinity for Hegel is grasped by a notion, and for Bergson by intuition.

James, who had first been influenced by Renouvier, was later influenced by Bergson. Always retaining his preference for discontinuities, he liked to represent time as consisting of drops or blocks. But inside these drops, inside each of these blocks, there is a con-

tinuity, something like that stream of consciousness he had depicted in his *Psychology* or like the duration described by Bergson in *Time and Free Will*.

We have seen Bergson's complete opposition to Hegel and Renouvier. We have also seen how James tried to unite Renouvier and Bergson and even, we may say, in one chapter of the *Pluralistic Universe*, to interpret Hegel in nearly Bergsonian terms. Léon Brunschvicg is another philosopher who disagreed with Bergson on many points but was in agreement with him in his opposition to Hegel and Renouvier. According to Brunschvicg, one has to choose the antitheses and not the theses in the Kantian antinomies. This means that instead of taking the side of the finite, one has to admit the idea of an indefinite regression in time, of indefinite divisibility in space, because the activity of the human mind is always present, always relating events to one another in an endless network. So, according to Brunschvicg, Renouvier had a quite incorrect view of the person because he represented it realistically as a closed world; in fact, the person at its highest point is always open to rational generality and moral generosity. His choice of the indefinite is linked with his Spinozistic conception of the mind as infinite.

Thus, surveying the development of philosophy after the statement of the Kantian antinomies, we see Hegel uniting theses and antitheses, Renouvier choosing the theses, Brunschvicg the antitheses, and Bergson two of the theses, but in a quite different manner from that of Renouvier.

Bradley, who may be considered as a follower of Hegel on many points, takes a different view of this question (nearer to that of Bergson and James than to any others). For him, all these difficulties come precisely from the relating activity of the human mind. Both terms of the Kantian antinomies are wrong, because reality is the whole, and not either the finite term or the indefinite movement.¹

Certainly there is something right in the view of Bradley: all

¹ The relativity theory of Einstein offers a new way of reconciling finitude and infinity. He proposes that we consider the universe as a moving sphere, at the same time boundless and finite. But does this really end the conflict between these two conceptions, or is it not rather a kind of symbol of a union we have to seek at a deeper level?

these problems arise only because of the finite nature of the mind of man, which thinks only in relations. Nevertheless, there will always be the protest of the finite individual against such a conception and the insistence on the value of the finite particular, as James says—what Blake called the minute particular. But this very consideration for the particular arises from the fact that we see it as infinite. So we find here a junction of finite and infinite; and after having denied with Bradley the sufficiency of both these terms, we have to maintain them in their reciprocal tension, revealing the nature of the human mind and the nature of the object of the human mind as unions of finitude and infinity.

Philosophers very early characterized the supreme existence as the One. Xenophanes said that God is one, and Parmenides drew the consequences of the former's vision. Plato's *Parmenides* examines this thesis. First it extols the One above any distinction, but in such a manner that we cannot even say whether it exists. In opposition to this pure, ineffable oneness, he shows us a no less ineffable multiplicity. Then Plato passes to the formulation of other theories that try to unite a no longer absolute oneness with a no longer pure multiplicity, and he represents the Idea as a whole comprehending several particulars within it. Such at least may be one of the interpretations of this most obscure dialogue, for we may find in the *Philebus* the confirmation of this Platonic theory of a rich unity comprehending diversities within itself.

Aristotle was no less opposed to the Eleatics than his master, Plato, and, in fact, his treatment of them lacked the great respect that Plato showed for Parmenides. Probably the most important result of his discussions is his idea that the One does not constitute one idea except by analogy. There is a multiplicity of Ones. We may compare the analysis of Aristotle on this point with the examination James made of the idea of the One in his *Pragmatism*.

The first hypothesis of the *Parmenides* was interpreted by the Neo-Platonists as an affirmation of the superessential One. At the same time, these philosophers represented mind as a union of unity and multiplicity, inferior to the One, but sometimes touching it in moments of ignorant ecstasy. Thus, in them, as in Plato, we find a formulation of two theories about the One—we might even say, two Ones.

The first of these Ones was emphasized by orthodox mystics like Dionysus the Areopagite, and much later St. John of the Cross, and by unorthodox mystics like Eckhart and Boehme; the second was emphasized by Leibnitz in his theory of the monads.

The post-Kantian philosophies of Schelling and Hegel are dominated by this idea of oneness. Hegel reproached Schelling with having conceived an abstract oneness that negates all differences—something analogous to the One of the first hypothesis of the *Parmenides* and of the mystics. Hegel himself thought that oneness is not opposed to, but inclusive of, multiplicity, and always moving toward a richer synthesis.

It may be said that this idea of the One, by virtue of its arithmetical character, is unable to express the highest reality. Evidently the philosophers who have resorted to this idea have understood it in a more than arithmetical sense, as signifying an infinity and, as Plato said, an overflowing power.

The same observation concerning the insufficiency of the idea of the One, when taken in an arithmetical sense, may be useful also in criticizing the opposite theses, that the world may be called not One, but two (dualism), or many (pluralism). All these doctrines appear to remain on a quantitative level, and it is only if we lift them to the plane of the qualitative that their real value becomes apparent.

Dualism is probably one of the most primitive forms under which the world appeared to man. The vision of day and night, the experience of waking and sleeping, the feeling of good and bad—all no doubt suggested the idea that there are two opposed realities. Under different aspects this idea of duality has remained present in most philosophies. We find it in Plato in the distinction between the intelligible and the sensible world, the stable ideas and the flux of Becoming, the soul and the body, the limited and the unlimited; in Aristotle in the distinction between form and matter, Potency and Act; in Descartes in the distinction between thought and extension, in Kant in the distinction between the world of noumena and the world of phenomena and between form and matter; in Bergson in the distinction between life and inert matter, memory and extension, duration and space, open society and closed society, and in such philosophers as Whitehead, Russell, and Santayana, whatever may be their differences, in the distinction between

essences and existences. Whitehead, who opposes the Cartesian bifurcation between thought and extension, replaces it in fact by another bifurcation, namely, that between essence and existence.

What we have to retain from the observation of these dualities is that mechanism, or rather that dynamism, of oppositions by which the human mind sees the universe with its battle of light and darkness.

As for pluralism, it is in itself a fighting theory, an opponent of monism. But again its value lies less in the fact that it states that there are several realities than in its feeling for the richness of reality, the irreducibility of the concrete to concepts, and the openness of the future.

If we recall what has been said about the infinite and the finite, we shall see in what sense monism, as the affirmation of the infinite, and pluralism, as the affirmation of the many finites, may be compatible with each other. What is important here is not so much these theories in their static character or their definite formulae as the yearnings of the human soul of which they are the expression. Dualism, for example, expresses the element of tension and opposition in the soul. If we consider these theories in this light, we shall no longer find ourselves in the presence of 'isms,' but filled with the sense of diversity, duality, and unity, or, to use Peirce's terms, Firstness, Secondness, and Thirdness.

The word 'absolute' means separate from everything. Such was the *Logos* of Heraclitus, at least according to one of his sayings. Such also is the One of the first hypothesis of Plato's *Parmenides*. We may perhaps describe the thing-in-itself of Kant as absolute in this sense. And such is the Absolute Other of Kierkegaard.

It is a strange fact that the word 'absolute' has gradually come to mean a reality comprehending all other realities, or rather all illusions, because the Absolute is the one reality. Such was the Absolute described in *Parmenides'* poem as a perfect sphere. Such also is the Absolute of Hegel and of Bradley.

So we see a kind of conflict in the idea of the Absolute itself, a conflict between the Absolute as separate and the Absolute as inclusive; and once again we see the importance of Plato's *Parmenides*, which describes this inner struggle.

The idea of the Absolute is opposed to the idea of the relative.

This is the reason why Kant and Hamilton said that the Absolute is unknowable, since to know is always to relate. According to Hegel, the Absolute is opposed to every particular relation, but is in itself a whole of relations. In fact, the whole of relations constitutes the Absolute. We arrive here at the idea most opposed to the idea of the Absolute as separate. Hegel considers this Absolute as the most fundamental reality, from which all relative realities are only abstractions. The Absolute as conceived by Bradley is only a more static formulation of this Hegelian Absolute. In Bradley there is no longer that movement which was always present in the philosophy of Hegel. Starting from Hegel, Bradley returned to Parmenides. On the one hand, there are appearances (which are not), and on the other hand there is the Absolute, which is the appearances transmuted, in a manner that we do not know, into a reality that we do not know. The system of Bradley could be criticized in the same way that Plato criticized (in the first part of the *Parmenides*) his own theory of Absolute Ideas: the separation between appearances and Ideas is so complete that their relations cannot be understood.²

We always return to the same observation: the term 'absolute' has two meanings, and the interest which it evokes is due in part to this ambiguity, this play of meanings, this shimmering of its two facets of separateness and inclusiveness.

We might make similar observations concerning the word 'transcendence.' But here what we are confronted with is not a word meaning first one thing (the separate) and then its opposite (that which includes everything), but a word that first meant a movement and has since come to mean the terminus toward which the movement tends. To transcend is to ascend toward something higher. In this sense, as Heidegger has very rightly observed, there is a movement of transcendence in the mind. The transcendent term (contrary to the accepted meaning, but in agreement with the original and fundamental one) is the mind. But the word has come

² The idea of the Absolute appears as an essential element in the antinomies of Kant, since, according to him, our mind always wants to possess the whole of the system of conditions, and, on the other hand, can never possess it. This conflict between our need of an absolute and our tendency to pass always from condition to condition explains the conflict in the Kantian antinomies.

to mean that toward which the mind transcends. And certainly this ambiguity accounts in some measure for the interest evoked by the word 'transcendence,' just as the ambiguity we have noted in the word 'absolute' explains in part its attraction.

'Transcendent' is opposed to 'immanent' when we take these two terms as signifying the object of our thought. Nevertheless, there is no necessary opposition between immanence and transcendence. For example, the God of Christianity is certainly represented as transcendent, and yet it is said that we live and move in Him. Some philosophers have coined the word 'panentheism' to differentiate this immanent transcendence from the immanence of pantheism.

The word 'transcendence,' taken in its somewhat ambiguous meaning, indicates the nearly unattainable terminus of our thinking and striving, as well as our thinking about and our striving toward it. This is its value—to make us sensible of what we cannot completely take hold of and of what we have to strive for.

The problem is to maintain at the same time these two efforts of the mind, i.e. to posit this terminus and to represent our striving toward it. The movement of transcendence we perform is directed toward something that surpasses, i.e. transcends us, but is this something that surpasses us independent of our minds, or is it a property of the mind to project above us its highest point? If we admit the latter alternative, we might say that we have transcended even transcendence and returned to immanence. But the question is whether, by performing this movement of transcending transcendence, or at least, by performing it too consciously, we should not be in danger of losing the value of transcendence. Thus, the answer to the question, if it is too explicit, risks destroying the value of what is indeed the very heart of the problem.

All these terms we have studied have revealed themselves as in some manner inadequate: the perfect, because of its rationalistic and moral implications; the infinite and the One, because of their mathematical aspects; the Absolute and the transcendent, because of their conflicts and ambiguities. But, when considered as designating a manner of looking at the world, even in its finitude and multiplicity, the infinite and the One manifest their value; and the

conflicts and ambiguities of the Absolute and the transcendent allow us, as Damascius has shown, to see something that shines at the limit of our intelligence, half-revealing itself to us and half-hiding itself. The conflicts within the idea of the Absolute still remain on a nearly objective level. The ambiguities of the transcendent introduce us to a still higher region.

WITH his theory of oppositions and his vision of the tensions within Becoming, Heraclitus may be said to have anticipated dialectics. But in order to understand the development of dialectics, one has to take into account, even more than Heraclitus, the opposite school. that of the Eleatics. Zeno, in defending the thesis of his master, Parmenides, against the Pythagoreans, contributed to the growth of dialectical methods. In fact, the existence of both of these opposed schools explains the development of the Sophists. But it was with Socrates, whom his foes considered a Sophist, although he was evidently the strongest opponent of their doctrines, that dialectics took on more definite form. 'Dialectics' comes from a Greek word that means to converse, and, as is well known, Socrates used philosophical conversation as a means of leading men toward the truth. The Platonic dialogue follows along the same lines as the Socratic. Plato tells us that the true dialectician is always very careful to state clearly his agreement with the interlocutor before passing to a new proposition. The peculiarity of Platonic dialectics is that it gradually ceases to be simply an art of conversation and becomes a real method and science. Such is the form in which it is presented in the *Republic*. There Plato shows us that, passing from the statements of the particular sciences, we must, to use his own expression, destroy¹ the hypotheses on which these sciences are founded in order to attain a more general knowledge; ascending by the destruction of successive hypotheses to more and more general sciences, we come at last to a region in which we pass from Ideas to Ideas without the intervention of any particular or hypothetical²

¹ If we accept the interpretation of Burnet and Taylor.

² The two are fundamentally the same

elements. And then we come to the foundation of all science, which is at the same time the foundation of the universe, namely, the Good, the intelligible sun. But after this ascending dialectics, there is a descending one, which starts from the higher levels of reality and returns to levels nearer our particular experiences. However, it is not proved that the descent from the Good to the lowest species is continuous; for it is possible that there is a chasm between the Good and the highest essences that are derived from it, and there seems to be a chasm also between the lowest species and the individuals. Thus, there seem to be two discontinuities, one at the beginning, the other at the end, of the dialectical scale; and we may say that these two breaks guarantee a freedom in the dialectical process that we do not find, for example, in Hegel.

There is in Plato not only this intellectual dialectics, but also what has been called the dialectics of love, which passes from attachment to particular beautiful things or persons to universal Beauty—what Plato calls the ocean of Beauty itself.

In the *Phaedrus* we find still another, probably later, stage of Plato's dialectical thinking. There the thought of the philosopher is compared to the skill of the meat-carver: just as the latter has to discover the articulations of the animal he is cutting, so the dialectician must follow the articulations of the real. The tendency Plato showed here culminated in the fusion of dialectics with what he called the process of division, whereby, through a division of things, always preferably in two, we classify them until we finally arrive at the species under which the being we seek can be found.

Aristotle did not give dialectics so high a place as Plato. According to Aristotle, dialectics is only the art of probable conclusions. He did not appreciate the mathematical sciences as Plato did, and as for dialectics, he considered it too abstract to be completely satisfactory. Nevertheless, the logic of Aristotle has sometimes been understood as a kind of dialectics; and this is no doubt why Descartes, in speaking against the Aristotelian logic, criticizes the universals of what he calls the dialecticians.

So we may say that Aristotle and Descartes are foes of dialectics (in the different meanings they give to this term³), and with them

³ It should be noted that there is indeed little in common among these different uses of the term and that the doctrines criticized as 'dialectics' by

we may also include Kant. For Kant, dialectics is not even the art of probable conclusion. It is rather the art of illusion. Yet in Kant there is a science underlying this art of illusion, namely, the Transcendental Dialectic, which is the third part of the *Critique of Pure Reason*, coming after the Transcendental Aesthetic and the Transcendental Analytic. Whereas the forms of sensibility and the categories of the understanding, when applied to experience, give us truth, or more precisely, allow us to constitute truth, the ideas of reason are too lofty and too imprecise to be applied to experience and to constitute a truth. This is the case with the ideas of the world, the soul, and God. The dialectical character of reason reveals itself particularly when we examine the first of these ideas, for we then see that the world can be said to be neither infinite nor finite in space or in time. As for the soul and God, the solution of these problems is not so completely out of the question, because, distinguishing between noumena and phenomena, Kant says that the soul, as a noumenon, is free and that God exists (though he has to acknowledge that within phenomena we can find neither soul nor God). Concerning all these ideas there is a kind of struggle of the mind with itself. When we take the ideas of reason as infinite, they seem to be too large for our minds to comprehend them; and when we take them as finite, they are too small. Thus, the mind is exceeded by them or exceeds them, and there is never any adequacy between the mind and the object of its thought in this realm of ideas. The mind attempts to think the totality of the conditions of everything given to it, and at the same time these conditions elude it. We always encounter this same vain struggle.

Nevertheless, the ideas of reason may have a use even within experience if they are understood as rules indicating the direction we have to take in order to unify phenomena more and more, even though we know at the same time that they will never be completely unified.

Aristotle and Kant were, as we have said, foes of dialectics. But in Kant himself another philosopher, Hegel, was able to find the seeds of dialectical thinking. Hegel observed that Kant, in his study of the categories, had arranged them in such a way that in each part of the table of categories the third seems to be the synthesis of

Aristotle, by Descartes, and by Kant are quite different not only from one another, but also from the dialectics propounded by Plato.

the first two. For example, singularity is a product of generality and particularity: Socrates is a particular individual about whom we can say the things that apply to the whole of the class formed precisely by this particular individual; he is a particular treated as a general term—a member of a class, and at the same time the class of which he is a member. This insight was one of the origins of the Hegelian dialectics. Another was certainly the mind of Hegel himself, always thinking in oppositions like Heraclitus, and always in wider and wider syntheses like Plato. The union of these two modes of thought provided Hegel with his scheme of dialectics, with its apparently never-ending succession of theses, antitheses, and syntheses. At the end of this logical-metaphysical voyage we find the whole world as a rational totality, comprehending within it all the diversities we have seen.

From the Hegelian dialectics two other dialectics grew dialectically: on the one side, the dialectics of Marx, and on the other, that of Kierkegaard. Marx kept the Hegelian scheme of thesis, antithesis and synthesis. But he replaced the Idea, the superstructure, by the economic conditions of man, the substructure, thereby, as he said, standing Hegel on his head. It would be interesting to consider whether the antithesis in Marx does not have an even greater power in the synthesis than it does in Hegel. The theory of Marx may be considered a protest of realism against the idealism of Hegel, which, it is true, aspired to be realism transformed into idealism. Another protest was made from a very different standpoint by Kierkegaard. Even in its form his existential dialectics differs greatly from the Hegelian dialectics, because, it seems, there is no synthesis in Kierkegaard. His dialectics is affective, not rational, and it is double, not triple. According to Hegel, reason achieves a synthesis of the two opposite terms; but Kierkegaard likes to keep the opposite terms in their opposition and does not want them to be fused into a third term, and since, for him, reason is not present to fuse them, they remain irreconcilably two. So there is no synthesis of the finite and the infinite, there is only a contact between these two irreconcilable ideas, a contact that is an offense to human reason and that is experienced in faith.

Proudhon conceived a dialectics somewhat comparable to that of Kierkegaard, a dialectics in which thesis and antithesis are not

united in a synthesis but stand in an active equilibrium, an armed union, as George Gurvitch has well shown.

The dialectics of Kierkegaard is comparable to what might be called the dialectics of Pascal. Both constitute a perpetual play of *pro* and *contra* in the human mind. Nevertheless, there is a difference between them. Pascal is nearer the thought of a synthesis than Kierkegaard. At times Christianity appears to Pascal as a union of contraries, while at other times it is very near the Kierkegaardian contact between extremes.

Hegel saw admirably two processes of intellectual dialectics, which he combined: the march from opposite to opposite and the synthetic character of the third term. But the dialectics of Kierkegaard (and, we may add, of Nietzsche) is a pathetic rather than an intellectual dialectics. Theirs is lived and felt. It passes from thesis to antithesis, but the synthesis is unattainable, except in rapture and unconsciousness. The synthesis cannot be formulated in words; even the thesis and the antithesis are ineffable. We are in the realm of immediacy, not in that of mediation.

We are far indeed from the Hegelian dialectics, with its solemn and regular procession from thesis to antithesis and synthesis (although in its first formulations it was very much more full of life and spontaneous rhythm), very far also from the Platonic dialectics, with its movement upward and downward (although it seems much freer than that of Hegel, stopping before the One on the one hand and before the many particulars on the other and avoiding the violent seizure, or rather attempt at seizure, of reality made by the Hegelian dialectics).

Hence, we can approach a general conception of what a non-Hegelian dialectics might be.

By an interplay of theses and antitheses that destroy each other, we constitute an existential dialectics that passes from perceptive immediacy to ecstatic immediacy. We might say that there is a positive ontology of perception⁴ and a negative ontology of the mystical event. For dialectics is the way, a way that is forever gone

⁴ Naturally, we do not here understand perception as classical psychology understands it, but much more as Whitehead, or as Heidegger or Bergson describes it.

over again, forward and backward, and is constituted, to borrow an expression of Damascius, by the rending of hypotheses and ideas.

In this existential dialectics we might hear brief bits of broken dialogue between the moments when the dialogue proper ceases and when silence, if we may so speak, makes itself heard—the silence of perception in which the mind is nourished by things, the silence of ecstasy, where the mind achieves a union with its own highest point, which is at the same time the highest point of the world.

Between these two immediacies there is a tension and an intensity by which existence is defined, a tension that endures between the transcendent immanence of perception and the immanent transcendence of ecstasy.

But these very words show that the moments when the dialogue apparently ceases are nevertheless moments when it continues, or at least whence it may again take its beginning; for when reflection is directed upon them, perception and ecstasy are, we might say, dialecticized. Hegel and Kierkegaard have emphasized, each in his own way, this paradoxical union of relation and non-relation, of immanence and transcendence.

The Hegelian dialectics leads us toward the vision of a whole. But the dialectics we have come to discern dimly remains in parts and particulars, in crumbs as Kierkegaard says, in the minute particulars of Blake, in the singular pulses of experience of Blood and James. We might speak here of a logic of pure quality (really the pure illogic of quality) where the more is not more than the less, a logic that would not render our view of the world richer, but which would lead us toward a sort of nude and blind contact with the Other.

There is not one ineffable, but ineffables in the plural, many ones, each at the same time unlimited and limited. Here the Absolute is conceived more as intensity than as totality. It is a felt Absolute, felt (let us recall Thomas Traherne) in a very little thing.

The question remains, however, whether these multiple ineffables are not one—in a manner itself ineffable.

Plato wanted to constitute a dialectical science. But one may question the possibility of such a science as it was conceived by Plato and Hegel. On the other hand, the disparagement of dialectics in Aristotle and Kant seems equally questionable. Plato and Hegel say that it is a good method, their critics say that it is a bad method.

But in reality it is not a method at all. It is the process of the mind in the presence of the problems of metaphysics. It is our way of experiencing them, of enriching and at the same time of wounding ourselves by these successive certainties. So our dialectics would be nearer that of Kierkegaard and Pascal than that of Plato and Hegel.

In fact, we might interpret the Kantian dialectics itself in this manner as the expression of the division of the mind when confronted with these difficult problems. Accordingly, we might discern analogies between Kant and Kierkegaard. Hegel sometimes criticized Kant for expressing what he called the Unhappy Consciousness. And we might think of Kierkegaard too as the expression of this Unhappy Consciousness, rebelling against the very triumph of Hegelian optimism.

Dialectics is consciousness in its unhappiness, in its ever-reappearing distance from things and from itself; but, as Hegel saw, our destiny is perhaps to make our happiness out of this Unhappy Consciousness, when we perceive the movements of the mind as the expression of the multiplicity of things and the reflection of their movements.

Nothing is more characteristic of contemporary philosophy than the emphasis on the subjective in its utmost subjectivity and on the objective in its utmost objectivity; but let us add the qualification that the word 'objective' is rather clumsy in this context and that we should need some other to denote that density behind concepts, that opacity, that intermingling without any name, comparable to the mud that seemed to young Socrates—for quite other reasons, to be sure—to elude any Idea.

These armed antitheses that appear at the extreme point of advance of contemporary thought, this great objectivism and this great subjectivism (to borrow the expressions of Sheldon, who uses them, it is true, in reference to different concepts) might be found equally well in other high activities of man, in other types of vision, like those of Van Gogh and Cézanne, for example. Van Gogh represents the highest point of subjectivity, Cézanne the thirst and hunger for objectivity at its utmost point, and the desire to 'make the image.'

But even here we cannot, any more than in philosophy, separate

great objectivism and great subjectivism. For by a fatality as reasonable, Hegel would say, as every other fatality, we are attracted to Cézanne less by his objectivity than by his need for objectivity, which is something very subjective indeed, and which appears the more subjective as we see it rather as an effort than as an achievement; and on the other hand, Van Gogh enjoys being absorbed in a red or a yellow and becoming all object, so to speak.

So the subjective leads us to the objective, as the objective brought us to the subjective.

Does this not indicate that we must at the same time push subjectivity and objectivity toward their utmost points and yet recognize that they cannot be known apart from each other and even that they must be annihilated in this movement of thought that strives to approach nearer and nearer to things?

This is only another way of saying again that there is a deep relation between dialectics and realism.

IN OUR study of the different forms of realism we have noted the dialectical process by which the realism of James, of Bergson, of Russell and the neo-realists, who hold to the unity of the object and its image, has passed into the other and opposite realism of those who, like the critical realists, separate object and image. There is in realism itself a dialectics that is explained, as is every other form of dialectics, by a reality that transcends it.

And is there not also a dialectical movement that passes from the Husserlian bracketing to the Heideggerian assertion that no bracketing is possible? ¹ Husserl tried to separate essence and existence. In vain. The thought to which he gave birth has negated his own thought. Existence has no essence, says Heidegger: the idea of essence is man-made, artist-made, artificial in the proper sense of the word, since it is constructed in the same way as the pattern of the craftsman. This anthropomorphism is one of the original sins of philosophy.

So, if there is a dialectics of realism, if there is even a dialectics of phenomenology, and in general, if there is a dialectics in the human mind at all, it is because dialectics is not the final explanation, and is indeed an explanation only because it is itself explained by another term, namely, reality. Whence comes this interplay of antitheses, this gleaming of the facets of one opposite under the light of the other, if not from the need and the striving of the mind? It tries to come nearer and nearer to the real. The real refuses a

¹ In fact, one could find in Husserl many prefigurations of Heidegger's ideas: the idea of being-in-the-world, the theory of things in their corporeality; the emphasis on the natural, naive standpoint and on perception as the starting point and terminus of science; the role of the body; the affirmation of the non-intentionality of perception and of the intentionality of feeling.

purely intellectual contact and eludes it, and we are capable only of taking successive, alternating, contrary views of it.

We meet again, and this time perhaps in a more objective manner, the idea that we have already formulated: dialectics is the way. But the way must be explained by its *from* and by its *toward*.

Dialectics will be fully dialectics only if it dialecticizes itself; that is, if dialectics, which puts everything else in its place, takes its own place also, which is between the two non-dialectical terms (if we may use this word).

We have seen dialectics as the never-ending process of the mind examining itself and what it thinks. But there must be a conclusion, and our conclusion will be about conclusion. Every time we make a judgment, this infinite progress of the mind is stopped, concluded in an affirmation. This affirmation may be called faith, whether religious faith, as it is commonly conceived, or the animal faith about which Santayana speaks, a faith by which we are linked with the world and with things.

We have already seen that for Plato there are terms that are outside dialectics—not only the One above essence, unchanging and yet giving birth to change, but also the particular unchanging terms.

So we see again that dialectics implies terms that are outside itself. Now, placing ourselves no longer in the presence of the term contemplated by the mind, but before the mind itself, we may say that at every moment the mind has to put a stop to this inner dialogue, which, according to Plato's definition, constitutes its thought, and has to formulate judgments. A judgment is an achievement—something completed.

Yet corresponding to judgments there has to be that which is completed. And this is what we call a thing. Although the phenomenologists maintain that a thing is a series of its perspectives, we have to say also, precisely because we want to define things as they appear to us, that they have a unity of their own, conclusive in themselves and including their qualities.

Nietzsche saw the world as a dialectical process without beginning or end; indeed, even to use the word 'dialectical' here is to say too much, because the world, as he conceived it, was without

any meaning. But even in this absurd world the Superman, as he called him, has to say Yes to life, i.e. has to conclude on the side of hope even in a world of hopelessness. Kierkegaard criticized the system of Hegel precisely on account of this never-ending dialectics, which does not allow the real individual conclusion—what he called the repetition, the act by which we take upon ourselves our human condition and seal our nature with our will, or at least the part of our nature that we find worth retaining.

Personality is not necessarily achieved in itself. It may be concluded by art, by the work it achieves. Hegel has said that the inner has no value except in terms of the outer, and this is true in the sense that our inner conclusions must be completed by our outer conclusions.

When Aristotle spoke of entelechies, that is, of beings which are completely in Act, when his master, Plato, spoke of the 'substances which have become,' they meant these stabler products of Becoming, these islands of reality in the sea of Becoming, which Nietzsche had also seen.

At the beginning and at the end, if we can speak of such moments, there is a unity of subject and object. And dialectics is between the two. It always implies distance between subject and object, and this distance is consciousness. Bradley's idea of the separation of the *that* and the *what* in judgment appears as one of the most convincing illustrations of the divisive power of consciousness. We may also recall the Unhappy Consciousness of Hegel and many other passages in his writings and in those of Schelling.

If truth is in judgment and implies consciousness, reality is in unconsciousness.

If we try to study such metaphysical ideas as Being, the Absolute, transcendence, or space, we see that each leads us toward something that lies beyond, or rather beneath, ideas.

In other words, all relations must be merged in a super-relational experience (the non-consciously experienced experience). It is rather in feeling than in reason that we shall find what for us is the closest approximation to the Absolute. If we want to regain the paradise lost, we must lose ourselves in the paradise regained; this is even a condition for regaining it. We must lose ourselves in it in order not

to lose it. And consciousness takes place between the loss and the regaining of paradise; it is essentially unhappy.

In going from its starting-point to its terminus, consciousness passes by the negativity that guides the interplay of the antitheses, but beyond this Hegelian negativity, a more essential negativity arises, really destroying,² responding to the need of the 'existent man' of annihilating his own thought in an attitude of submission to this dominating transcendence, which is not the transcendence of any dogma or of any philosophical system.

There is in this transcending movement a self-accomplishment that is at the same time self-destruction, a failure that is triumph. We may represent this idea mythically by uniting the stories of Phaeton and Empedocles. The one, like the other, fulfils his destiny by self-destruction. Let us add that the philosopher's act of self-destruction is accompanied by, and even expressed in, an act of self-construction.

No doubt what we might call the charm and the attraction of these ideas of the transcendent and the Absolute derives, in part, from their ambiguity and the sparkling of their meanings. Transcendence appears as a *terminus ad quem* and, more etymologically, as we have seen, as a movement toward. The Absolute is at once the separate and that which unites. We have only to think of one of the themes of Plato's *Parmenides*, where the first hypothesis is the separate Absolute, and the second, the unifying Absolute.

This brings us back to the idea of the ineffable, which can be described only in antitheses and paradoxes (as, in another domain, the English metaphysical poets perfectly knew). The Absolute and the Transcendent are the extreme points of thought, where it reaches its own limits. At that moment, a light glitters of which we cannot say whether it comes from thought or from the Other, the Nameless Thing—something like the Dark Deity of D. H. Lawrence.

Is it possible for us to return to immanence without losing transcendence and to preserve the value of those myths after their destruction by thought? Is an eternal recurrence of dialectics possible, whereby the first term, enriching and impoverishing itself, reappears again and again in its Firstness? Questions of this kind are philosophy itself, for philosophy is rather questioning than

² The idea of a negative ontology must not lead us to the belief in an objective Nothing. As Bosanquet says, thought is always of a positive content.

answering. It is movement, dimly discerned, rather than seen, from reality through dialectics and antitheses toward ecstasy.

In the presence of works of art, or achieved worlds, or simply things, we experience a fulness of being, we no longer separate the inner and the outer, the infinite and the finite, and the unceasing dialogue comes to its conclusion, in silence.

Selected Bibliography

A CONSIDERABLE degree of selection was exercised in determining what writers were to be included in the following bibliography. As a general rule, it was decided to omit names and works that would most certainly be familiar to readers of philosophy. It does not necessarily follow, however, that the names found below will constitute an unfamiliar list. Rather the author has attempted to include writers who are less widely known and whose works are difficult to obtain or have not been translated into English.

- Alam (1868-) : *Propos d'Alam* (1908, 1909, 1911, 1914, 2 vols., 1919)
 — *Les Idées et les âges* (2 vols., 1927)
 — *Idées* (1942)
- Baader, Franz Xavier von (1765-1841): *Works* (16 vols., 1851-60)
- Bachelard, Gaston (1884-) : *Essai sur la connaissance approchée* (1927)
 — *Le Nouvel Esprit scientifique* (1934)
 — *L'Expérience de l'espace dans la physique contemporaine* (1937)
 — *La Dialectique de la durée* (1936)
 — *La Philosophie du non* (1940)
- Berthelot, René (1872-) *Évolutionnisme et platonisme* (1908)
 — *Un Romantisme utilitaire* (1911)
- Bichat, Marie François Xavier (1771-1802): *Anatomie générale* (1801)
 — *Anatomie descriptive* (1801-3)
 — *Recherches physiologiques sur la vie et la mort* (1800)
- Bolzano, Bernhard (1781-1848): *Logik* (1837)
- Boscovitch, Roger Joseph (1711-87): *Opera pertinentia ad opticam et astronomiam . . .* (5 vols, 1785)
 — *Theoria philosophiae naturalis redacta ad unicum legem virium in natura existentium* (1771, trans in Open Court Series, Chicago)
- Brentano, Franz (1838-1917). *Psychologie vom Empirischen Standpunkt* (1874)
 — *Von der Klassifikation der psychischen Phänomene* (1911)
- Brochard, Victor Charles Louis (1848-1907): *De l'erreur* (1879)
 — *Études de philosophie ancienne et de philosophie moderne* (new ed., 1926)

- Brunschvicg, Léon (1869-1944). La Modalité du jugement (1897)
 — Les Étapes de la philosophie mathématique (1912)
 — Nature et liberté (1921)
 — L'Expérience humaine et la causalité physique (1923)
 — Les Progrès de la conscience dans la philosophie occidentale (1927)
 — De la connaissance de soi (1931)
 — Héritage de mots, héritage d'idées (1945)
- Cabanis, Pierre Jean Georges (1757-1808). Rapports du physique et du moral de l'homme (1802)
- Cassirer, Ernst (1874-1945): Das Erkenntnisproblem und die Philosophie und Wissenschaft der neueren Zeit (3 vols, 1906, 1910, 1920)
 — Substanzbegriff und Funktionsbegriff (1910, English trans 1923)
 — Freiheit und Form (1917)
 — Kants Leben und Lehre (1921)
 — Philosophie der symbolischen Formen (1923)
 — An Essay on Man (1944)
 — Rousseau, Kant, and Goethe (1945)
- Cournot, Antoine Augustin (1801-77). Traité de l'enchaînement des idées fondamentales dans les sciences et dans l'histoire (1861)
 — Considérations sur le marche des idées et des événements dans les temps modernes (1872)
 — Matérialisme, vitalisme, rationalisme (1875)
- Couturat, Louis (1868-1915) De l'infini mathématique (1896)
 — Les Principes des mathématiques (1905)
- Curtius, Ernst Robert (1886-). Die literarischen Wegbereiter der neuen Frankreichs (1919)
 — Marcel Proust (1927)
- De Vries, Hugo (1848-92). Die Mutations Theorie (1903)
 — The Mutation Theory (2 vols, 1909-10)
- Driesch, Hans (1867-1940). Der Vitalismus als Geschichte und Lehre (1905)
 — Leib und Seele (1920; English trans. 1927)
 — Philosophie der Organischen (1900, 1920, 1928, English trans 1909)
- Dupréel, Eugène (1879-) Traité de morale (2 vols, 1932)
- Fouillée, Alfred Jules Émile (1898-1922) La Liberté et le déterminisme (1883)
 — L'Évolutionnisme des idées-forces (1890)
- Frank, Simon (1877-). The Object of Knowledge (1915)
 — La Connaissance et l'être (1937)
- Gleizes, Albert (1881-). Vers une conscience plastique (1932)
- Goelernus, Rudolf (1547-1628): Lexicon Philosophicum (1613)
- Gurwitsch, George (1894-): Fichtes System der Konkreten Ethik (1924)
 — Les Tendances actuelles de la philosophie allemande (1930)
 — La Morale théorique et la science des mœurs (1937)
 — L'Expérience juridique et la philosophie pluraliste du droit (1935)
- Guyau, Jean-Marie (1854-88): L'Irréligion de l'avenir (1887)
 — Esquisse d'une morale sans obligation ni sanction (1885)

- Guyon, Madame (1648-1717). *Spiritual Torrents*, trans by A W Marston (1908)
- *Mystical Sense of Sacred Scriptures*, trans. by T. W. Duncan (1872)
- *Autobiography of Madame Guyon*, trans by T T. Allen (2 vols, 1892)
- Hamelin, Octave (1856-1907). *Essai sur les éléments principaux de la représentation* (1902)
- *Le Système de Descartes* (1911)
- *Le Système d'Aristote* (1920)
- Hartmann, Edward von (1840-1906) *Philosophie des Unbewussten* (1869)
- *Kategorien Lehre* (1896; 7th ed., 1923)
- Hartmann, Nicolai (1882-) *Neue Wege der Ontologie* (1947)
- *Grundzüge einer Metaphysik der Erkenntnis* (1921)
- Hodgson, Shadworth (1832-1912). *The Metaphysics of Experience* (1928)
- Holt, Edwin Bissell (1873-1946) *The Concept of Consciousness* (1914)
- Jerusalem, Wilhelm (1856-1923). *Die Urteilsfunktion* (1893)
- Koffka, Kurt (1886-1941) *The Growth of Mind* (1925)
- *Principles of Gestalt Psychology* (1935)
- Landsberg, Paul (1901-44) *Einführung in die Philosophische Anthropologie* (1936)
- *Essai sur l'expérience de la mort* (1936)
- Lavelle, Louis (1884-) *De l'être* (1928)
- *La Présence totale* (1934)
- *La Dialectique du monde sensible* (1921)
- *La Dialectique de l'éternel présent* (3 vols, 1932, 1937, 1945)
- Lequier, Jules (1814-62). *Fragments posthumes* (1924)
- *La Liberté* (textes inédits, 1936)
- Le Roy, Edouard (1870-). *L'Exigence idéaliste et le fait de l'évolution* (1927)
- *Dogme et critique* (1907)
- *Les Origines humaines et l'évolution de l'intelligence* (1928)
- Levinas, Emmanuel (1902-) *De l'existence à l'existant* (1947)
- *De l'évasion. Recherches Philosophiques* (1936)
- Lossky, Nicholas (1870-) *L'Intuition, la matière, et la vie* (1928)
- *A Basis of the Intuitivism* (1919)
- *The World as an Organic Whole* (1928)
- Memong, Alexius von (1853-1921) *Untersuchungen zur Gegenstandstheorie und Psychologie* (1904)
- *Über die Stellung der Gegenstandstheorie im System der Wissenschaften* (1907)
- *Über Möglichkeit und Wahrscheinlichkeit* (1915)
- Mounier, Emmanuel (1905-). *La Pensée de Charles Péguy* (1931)
- Nogué, Jean (1901-42). *La Signification du sensible* (1936)
- Price, H H (1899-). *Perception* (1932)
- Rauh, Frédéric (1861-1909). *L'Expérience morale* (1903)
- Ruyer, Raymond (1902-). *Esquisse d'une philosophie de la structure* (1930)

- Ruyer, Raymond (1902-). *La Conscience et le corps* (1937)
Saurat, Denis (1890-): *Tendances* (1928)
—— *Perspectives* (1938)
Spir, Afrikan (1837-90). *Gesammelte Werke* (2 vols , 1908)
Strong, C A (1862-1940) *The Origin of Consciousness* (1918)
—— *A Theory of Knowledge* (1923)
Vacherot, Etienne (1809-77). *La Métaphysique et la science* (1852)

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